

AND truly as we look for greater knowledge of human things and a ripper judgment in the old man than in the young, because of his experience and of the number and variety of the things which he has seen and heard and thought of ; so in like manner from our age, if it but knew its own strength and chose to essay and exert it, much more might fairly be expected than from the ancient times, inasmuch as it is a more advanced age of the world, and stored and stocked with infinite experiments and observations.—BACON, *Novum Organum* (Ellis and Spedding's edition, 1858), vol. iv. p. 82 (translation).

. . . So far is it from being true, as some would seem to suppose, that economic science has done its work, and thus become obsolete for practical purposes, an object of mere historical curiosity, it belongs, on the contrary, to a class of sciences whose work can never be completed, never at least so long as human beings continue to progress ; for the most important portion of the data from which it reasons is human character and human institutions, and everything consequently which affects that character or those institutions must create new problems for economic science.—CAIRNES, *The Character and Logical Method of Political Economy*, 2nd edition, lecture I., introductory, p. 22.

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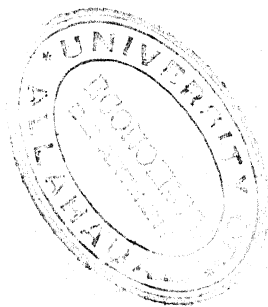
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EDITED BY
SIR ROBERT HARRY INGLIS PALGRAVE, F.R.S.

Omnia mutantur : nihil interit.

VOL. II.

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Ore trahit quodeumque potest atque addit acervo.

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INTRODUCTION TO VOLUME II.

THE remarks made by way of introduction to the first volume of this work, both as to the method followed and the general plan, may be usefully continued here.

The work has been carried on upon the lines previously proposed, with the assistance which the experience thus gained has given. The great desire of the Editor has been to assist the student to understand the existing position of economic thought. To do this effectively, the past also has had to be investigated, and the many lessons which it contains brought again before the mind. In this reference attention may particularly be drawn to the article on the Historical School of Economists, and the articles on the French, German, and Italian Schools of Economics, which the present volume contains. It has been encouraging to the Editor to be assured that the histories of the Dutch and the English schools, which appeared in the first volume, have been found of value by other economists, and he sincerely trusts that the histories specified above will also be serviceable in a similar manner.

The better knowledge of economic teaching in other countries, which has extended itself among us of recent years, is, of itself, one proof of the more fruitful attention given to the study. In every branch of science it is always advantageous to know how a subject has been regarded by those who have examined it from other points of view than our own. This is especially the case with such a study as economics. The ruling modes of thought and of training, the very conditions of society, all tend to cause differences in the way of regarding social questions. Familiar instances of this are found in the fiscal arrangements of different countries, the modes of levying taxation, the laws regulating labour, and many other matters. For instance, large sums are raised by methods of taxation in France—*e.g.* the Octroi duties—which would never be borne in this country. Here they would be considered to shackle trade and to oppress the working classes; there they are regarded as an equitable mode of collecting the sums needed for local administration.

Again, there are always some differences of treatment, some differences of surroundings, which colour and shape with their special influences the work of students in other lands. The sketch of the French school shows what progress economic thought had made in France before the end of the 18th century; the improvements in fiscal legislation, which were effected by successive ministers, influenced by the teaching of the *Économistes*, and exemplified by Turgot.

In Germany, the attention given to "cameral science," even in the mediæval period, gave early economic study a different and more practical turn from that followed in any other country of Europe. It will be new to many of our readers

to learn that a Zollverein for the empire was proposed in the Imperial Diet of 1522-23. But the most brilliant period in German economic thought is found in the present century. The influence of the great leaders of the German mind—of Fichte, Hegel, and Kant—was slow to develop itself in economics, but it has leavened all the subsequent literature of the subject.

Of the historical articles the one on the Italian school will probably contain most that is new to English readers. The political subdivision of Italy, carried on for centuries and perpetuated to a comparatively recent period, had its counterpart in the prolific wealth of Italian economic literature. The number of small principalities and independent states with the most dissimilar forms of government—from free-trade Tuscany, the great commercial republics of Venice and Genoa, to the militant mediævalism of Naples, with almost every intermediate form of political association—had the result of enriching Italian economic literature with the works of many writers who had continual opportunities of recording the effect of the different systems pursued.

The works of the writers noticed throughout the volume are widely unlike in character. Some are the labours of practised scholars with a perfect command of the vocabulary they employ, enforcing the broad views which wider experience enables them to express. Others have been the jottings down of hard-working but comparatively uneducated men, full of practical common sense and of shrewd observation, but sometimes exhibiting a deficiency in dialectic skill which prevents them from setting forth the truths they desire to inculcate to fullest advantage. Again, the history of science has often to record periods of abatement in energy, but after a time of quiescence the vigour of a living study invariably revives.

Besides the historical articles and those describing the works of economic writers, the side of pure theory has also received due attention. Thus, to select merely the subject of Method, the volume contains articles on Graphical Method, Historical Method, and Inductive Method, Logic and Political Economy, and Method of Political Economy, Mathematical Method, and many other articles on similar subjects, and the Laws of Political Economy, giving a full explanation of this difficult and often debated expression. Under the heading of Labour Exchange will be found illustrations of the Labour Notes issued by associations under the influence of Owen and Place. This phase of an earlier movement, designed to bring all labour to a parity of value, is now almost forgotten. But in its time it bore an important part among the passing influences on current thought.

I desire again to express my best thanks for many valuable suggestions, much kind help and useful information most liberally supplied. This has been to me a source of constant pleasure and a great advantage to the work; especially I desire to record that this volume has greatly benefited both as to its form and its substance through the special help of Dr. Bonar, Mr. Henry Higgs, Mr. E. Schuster, and Mr. H. R. Tedder. Only the Editor can know the value of this assistance.

Considerable progress has been made with Vol. III.

R. H. INGLIS PALGRAVE.

BELTON, NEAR GREAT YARMOUTH,
Midsummer 1896.

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DICTIONARY OF POLITICAL ECONOMY

F'S, THE THREE

F'S, THE THREE

Fixity of Tenure, p. 1; Fair Rent, p. 1; Free Sale, p. 2.

The "Three F's" is a cant term to express three things desired by some tenants of agricultural land—fixity of tenure, a fair rent, and freedom of sale of the tenant's interest in the land. The first two are closely connected, for the tenant would derive no benefit from fixity of tenure if the landlord was free to demand whatever rent he pleased; nor would the tenant derive benefit from the ascertaining of a fair rent if he might at any moment receive notice to quit. Fixity of tenure at a fair rent, or, to put the same thing in other words, a fair rent with the assurance that while circumstances continue the same it will not be raised, is the really desirable thing. Nor would this be hard to secure if the tenant always did his duty by the land and the landlord always did his duty by the tenant.

FIXITY OF TENURE.—It is clear that the cultivator will cease to cultivate unless he has some assurance of reaping the fruits of his labour. But the possible degrees of assurance are many. The cultivator who is not a proprietor must pay for the use of the land and must give up the land when he can pay no longer. Subject to this liability, however, he may be protected from disturbance either by law or by custom. Under Roman law the person who held land in virtue of a contract of *EMPHYTEUSIS* (*q.v.*) was absolutely irremovable so long as he paid his rent and did not commit waste. A lessee for a term of years is protected by English law so long as he fulfils the covenants of his lease. If there is no evidence to the contrary, our courts assume that every contract for the letting of agricultural land is for a year at least, so as to ensure the harvest to the tenant who has sown it. Under the Irish Land Act of 1881 the Irish tenant has fixity of tenure so long as he pays the rent determined either by a judgment of the land court or by an agreement made with his landlord to avoid the necessity of litigation. The

Crofters Act of 1887 contains similar provisions for the benefit of a class of agricultural tenants in Scotland. Legal fixity of tenure is also enjoyed by certain classes of cultivators in our Indian empire.

But the same result has frequently been brought about by custom. The mediæval villein was originally a slave cultivating the soil for his lord. But the services due from the villein were gradually fixed by custom, and then the villein acquired fixity of tenure. In England a further step was taken when these services were commuted for money. In the case of the metayers, who form so large a class in several European countries, the share of the produce due to the landlord came to be fixed at one-half or two-thirds of the whole; and subject to this claim of the landlord, the *METAYER* (*q.v.*) was secured in his holding by custom. Even in modern England the apparent insecurity of tenancies from year to year has been mitigated by the feeling general among all good landlords that a satisfactory tenant should not be displaced merely in order to get a higher rent from a newcomer.

FAIR RENT.—Few vaguer terms than "fair rent" can be found in the whole range of economics. Some limitation to the demand for rent is an indispensable condition of fixity of tenure. Such a limitation may be the result either of custom or of law. In those societies where custom has created fixity of tenure, custom has determined the landlord's claim whether for service, for produce, or for a money rent. But the ascertainment of rent by custom has not proceeded from any abstract notion of fairness. Experience has settled how much the cultivator can afford to give, one year with another. But when the rent is to be settled by judicial award, some guiding principle must be sought and is extremely hard to find. If the fair rent be taken to mean the economic rent, the surplus due to the natural advantages of the land, the amount of this surplus in the case of any particular farm, is something which eludes inquiry. But if the landlord or his pre-

decessors in title have expended capital on the improvement of the land, the fair rent must be something different from the economic rent. It must include, over and above the economic rent, an allowance for the return upon the capital invested in the soil in so far as the effects of that investment are not exhausted. The ascertainment of the fair rent would thus involve two additional inquiries, one almost hopeless, viz. how much the landlord and his predecessors in title have expended in improving the land, the other quite hopeless, viz. what additional value the land at this moment possesses as the result of that expenditure. But, if the law neglects these considerations and adopts the principle that a fair rent is that which allows a fair subsistence to the cultivator, new difficulties arise. In the first place, the standard of living differs much in different districts and in different classes. In the second place, it is well known that one man will thrive on the farm on which another man starves. In the third place, it is unlikely that the cultivator to whom a fair subsistence is secured by law will exert himself to produce anything over and above that fair subsistence. He is not likely to labour in order that there may be a surplus for the landlord. He is more likely to reduce his exertions to providing for himself and to trust that the next judicial award will lessen his rent in consequence. Lastly, the holding may be so small that under no circumstances could it support a family. In such a case the tenant will derive much of his income from other sources, and it will be doubly difficult to say how much his holding should contribute to his maintenance. These difficulties may explain the fact that in the Irish Land Act of 1881 and in the Scotch Crofters Act of 1887 no precise instructions were laid down for the guidance of the courts entrusted with the determination of fair rents. The actual process of determination has unquestionably been very summary, and the result is at best a rough compromise between the claims of the landlord and of the tenant. Only urgent necessity can justify the state in undertaking such a hopeless task as the ascertainment of "fair rents." So long as the settlement of rents by competition does not occasion any violent social disturbance, competition should be left to take its course (see FAIR PRICE; FAIR RENTS).

FREE SALE.—Wherever the first and second F's have been accepted, the third F follows as a matter of course. For the tenant who enjoys fixity of tenure at a fair rent has an interest in the land which approaches nearly to ownership, which has an appreciable value in the market, and which he should be allowed to sell whenever he wishes to part with it. It is for the landlord's advantage that the tenant should have this power of sale. For it is a strong incentive to the tenant to labour for the

improvement of his holding, and thus to augment the landlord's security. It is only just, however, that the landlord should have the right of objecting upon definite grounds to a person who wishes to purchase the tenant's interest and to take his place. Otherwise the landlord might occasionally be forced to accept a man who would let the holding dilapidate and fall into arrear with his rent. Such cases however are rare. Recent experience in Ireland shows that with fixity of tenure and judicial rents the tenant's interest in the land has become extremely valuable. The man who is willing to pay the high price demanded for the tenant-right is probably anxious to make the most of the farm when he gets it. In conclusion, it may be said that when the principle of the three F's has been fully admitted, the tenant is economically, although not legally, part owner of his holding. Economically, although not legally, there is a divided ownership. In countries which have only attained a low stage of economic development, where all economic relations are settled by custom, and where the mass of mankind have no distinct idea of "getting on," divided ownership of land may continue for many hundreds of years. Divided ownership was a lasting phenomenon in mediæval Europe. It is likely to survive a long time in India. But in modern Europe and especially in the United Kingdom it is not likely to last. The farmer who has secured the three F's will wish to take another step and to become full owner of the land. The landlord who has been obliged to yield the three F's will feel that he retains no more than a rent-charge on his land and a rent-charge of a highly precarious nature. The landlord will be willing to sell and the farmer will be eager to buy. When arrangements for sale are based on mutual agreement they are far more likely to be satisfactory to both parties than when resulting from the influence of legal rules. In the classic country of the three F's, in Ireland, where these have been so long demanded and at last so fully conceded, they are gradually losing their importance as one large estate after another is bought by the tenants. The Land Act 1881 was followed by the Ashbourne Act 1885, the Purchase of Land (Ireland) Acts 1891, and the Irish Land Act 1903.

[In *Cobden Club Essays*, "Systems of Land Tenure in various Countries."—J. S. Mill, *Political Economy*, and Speeches on the Irish Question.—J. Boyd Kinnear, *Principles of Property in Land*.—O'Connor Morris, *The Land Question in Ireland*.—Baden-Powell, *Land Systems of British India*.]

F. C. M.

FABBRONI, GIOVANNI (1752-1822), born in Florence of noble parentage. He devoted his time to natural science, political economy, and foreign languages, and attained high position under the government of the Grand Duke Leopold of Tuscany. When Tuscany was

annexed to the first empire of France, Fabbroni as appointed deputy in the Paris legislative assembly for Pisa, and baron of the empire. When Napoleon I. fell Fabbroni retired to Tuscany, and became honorary professor at the university of Pisa. He wrote on agriculture, technology, chemistry, physics, and mathematics, and his writings are read with interest to the present day. He was greatly esteemed at home and abroad: Jefferson dedicated to him a house in far Virginia; Cuvier honoured him with an historical eulogium.

A complete catalogue of Fabbroni's works is in his "Life" by Andrew Mustoxidi inserted in the *Biography of Tipaldo* (vol. i. p. 337 *et seq.*). In economics he supported Leopold's liberal reforms, especially free trade in corn, which he discussed in different polemical writings, and with more energy in his *Dei provvedimenti annonari* (1804, 2nd ed., 1817); here he examines and refutes the various systems of restricting commerce in corn, and concludes in favour of full liberty. In his treatise *Della prosperità nazionale, dell' equilibrio del commercio e dell' istituzione delle dogane* (1789), published under the name of VALENTINO FORONDA, he opposes custom-houses as they "are contrary to the principle of fraternity which ought to be the ensign of all nations," and violate the rights of property and liberty. No foreign commerce ought to be feared, because "it requires fourfold the advantages of our nation to cover the risks and commission, carriage, and the like." Thus, in his treatise *Dei premi d'incoraggiamento che si retribuiscano alle mercature, dei privilegi esclusivi che si accordano alle manifatture, e della libertà che si concede al commercio dei grani*, he opposes any interference with the natural development of commerce. In another treatise, he opposed (1791) the retrograde views of the *Sentimento imparziale per la Toscana*, by Biffi Tolomei. Fabbroni supports the theory of free-trade, gathering together all the arguments of contemporary writers: he sets out the respect due to property and liberty, describing the natural conditions through which national industries succeed in home markets; the advantage accruing to all classes from the increase of rent of land, which causes a demand for manufactures—an idea derived from the physiocratic doctrine as to the products of land,—which doctrine Fabbroni, however, does not accept in its entirety.

[*Scritti di pubblica economia* del cavaliere Giovanni Fabbroni (Firenze), 1847-1848 (in the *Raccolta degli economisti toscani*, 4 vols.).] A. B.

FACE VALUE, or nominal value, is the value mentioned on the face of a security as distinguished from the market value. The face value of securities passing by delivery determines the amount of the government stamp, and generally also of the broker's commission. Thus the stamp duty on £1000 Egyptian state domain bonds is the same as on £1000 Honduras bonds, though the market value of the former is (1893) about £1030, while the market value of the latter is only about £75. The face value generally represents the amount at which

the security is repayable or redeemable, but this is not always the case. There are some debentures which are repayable at a higher amount than the amount represented by the face value, and instances also occur of securities being redeemable at a discount. E. S.

FACTOR (Scots law). A paid commercial agent, remunerated by commission, entrusted with the possession, apparent ownership, management, and disposal of the employer's property and the management of all the principal's affairs in the place where he resides, or in a particular department. He is in point of law a person distinct from his principal. Factorship or "factory," is express or implied, special (*i.e.* limited to a particular department), or general, or both special and general, his commission in the last case conferring on him both general powers and special powers, which would not otherwise have been included. He must act personally, as a rule; he must remit, according to the principal's directions, all money received by him in the course of the factory business. The employer is bound by all engagements contracted by the factor within his powers; by the common law of Scotland, which in this respect differs from that of England, as well as by the FACTORS ACTS (*q.v.*) he can pledge the goods of his principal; and the risk of goods in the factor's hand is, as a rule, with the employer. Third parties deal with the factor as with a principal, unless he expressly deals as a factor for a disclosed principal, not one resident abroad. Factory endures, unless recalled, or terminated in terms of the commission, or superseded, during the life of the employer, and thereafter for unfinished transactions or those entered into in ignorance of the death of the principal.

[See Bell's *Commentaries*, i. 506. Also a steward, a law-agent who manages the letting of farms and other landed estate business. See also JUDICIAL FACTOR.] A. D.

FACTOR (English law). See FACTORS' ACTS. FACTORIES. The East India Company early established stations in the east for their trade with Persia, Japan, and especially India and the Islands. The first was built at Acheen, in Sumatra, 1602, and within forty years was followed by factories at Bantam, Surat, Agra, Banda, Masulipatam, Jaccatra (Batavia), Scinde, Hooghly, and many other places. Some, *e.g.* Fort St. George (Madras) and Surat, were fortified. These factories were houses containing resident traders—merchants, factors, and writers—the foreign agents of English traders, whether of individual "interlopers" or of a company. These gave their employers much trouble by private trading, perhaps because of their low salaries. Factors received only £20 yearly. Against factories are urged their expensiveness, the patronage enjoyed by the directors, the collisions they occasioned with the Portuguese and Dutch merchants, who feared

competition; for them it is argued that they systematised, extended, and gave continuity to the company's trade, that merchants without permanent stations and forts could not have resisted Dutch opposition (Mill's *British India*, 1840, vol. i. p. 105-106 and note). The success of the system seems to justify it. The factories became governmental centres and led to territorial acquisitions.

[Bruce's *Annals*, 1810.—Elphinstone, *Rise of British Power in the East*, 1887.] E. G. P.

FACTORS' ACTS. The Factors' Act 1889 (52 & 53 Vict. c. 45), which consolidates and repeals the previous acts dealing with similar subject matter, is a partial application to English law of the celebrated French maxim, "En fait de meubles possession vaut titre." The present act is the outcome of a long struggle between the mercantile community on the one hand and the principles of common law on the other. The general rule of the common law as of the civil law was *Nemo dat quod non habet*, and it was held that the mere fact that a person was in possession of goods, or documents of title to goods, did not enable him to bind his principal by disposing of the goods or documents in contravention of his instructions with respect to them. The merchants and bankers contended that, in the interests of commerce, if a person was put or left in possession of goods or documents of title, he ought, as regards innocent third parties dealing with him in the ordinary course of business, to be treated as the owner of the goods. The object mainly contemplated by legal rules is to guard against fraud, the object mainly contemplated by mercantile usages is to guard against the risks of insolvency. The legislature has effected a compromise between the legal and mercantile contentions, but in doing so has in each enactment given more and more weight to the mercantile opinion. The first Factors' Act was passed in 1823 (4 Geo. IV. c. 83), the second in 1825 (6 Geo. IV. c. 94), and the third in 1842 (5 & 6 Vict. c. 39). The object of these three acts was to validate sales and pledges made by factors and other mercantile agents of the same class who were entrusted by their principals with either goods or the documents of title to goods. The Factors' Act 1877 (40 & 41 Vict. c. 39) made a new departure by putting the seller who was left in possession of the documents of title, and the buyer who obtained the documents without paying the price, on the same footing as factors.

The present act, after defining the terms "mercantile agent," and "document of title to goods," enacts that when a mercantile agent is with the consent of the owner in possession of goods or documents, any sale pledge or other disposition made by him in the ordinary course of business shall be as effectual as if it were authorised by the owner of the goods, provided

that the person with whom he deals has no notice of the agent's want of authority (§ 2). If, however, the goods are pledged for an antecedent debt or liability, the pledgee acquires no better title than the pledger had at the time of the pledge (§ 4). Protection is then given to *bona-fide* exchanges of goods or documents, and to the lien of consignees, when the consignor is not the owner of the goods (§§ 5 and 7). Some important alterations in the law of sale are next effected. Henceforth if the seller is left in possession either of the goods themselves or of the documents of title to them, any sale or pledge by him to a transferee in good faith and without notice binds the original buyer, and in like manner, if the buyer of goods obtains possession either of the goods or documents without having paid for them, any sub-sale or pledge by him binds the original seller (§§ 8 and 9). Finally when any document of title is lawfully transferred to a holder for value, the seller's lien or right of stoppage is defeated to the same extent as it would be defeated by the transfer of a bill of lading which by common law is treated as a quasi-negotiable instrument (§ 10).

The misappropriation of goods or documents by factors or other agents is made penal by §§ 77-79 of the 24 & 25 Vict. c. 96. The Factors' Act 1889 applies to England and Ireland, and operates on transactions subsequent to the 1st January 1890. Its provisions are now applied to Scotland by the Factors (Scotland) Act 1890. M. D. C.

FACTORY ACTS. Under this general title is commonly included the whole of that very exceptional code of laws for the regulation of labour in this country, which, springing up about the beginning of the present century, and gradually extending, now covers almost the whole area of industrial production. The title is, however, no longer either logically or even conventionally accurate. For, firstly, the designation "factory" is applied by statute in a manner constantly varying and often inconsistent; and secondly, under that general designation are popularly included other establishments engaged in production, as workshops, which are not technically factories.

England is the original home of factory legislation. Previous to the first Factory Act (1802) no precisely similar enactments are known to have existed in any country. Statutes in restraint of slave labour there had been, both in ancient and modern times, and in constraint of free labour: as e.g. the celebrated Statute of Apprentices (5 Eliz. c. 4), of which Prof. Jevons says, in *The State in Relation to Labour*, p. 35 (1882), "The hours of labour were prescribed, not, as in our factory acts, by way of limitation, but by imposition"; but up to that time the regulation of voluntary work had been chiefly undertaken, where it was undertaken at

all, by associations of the nature of the Roman colleges (*Collegia Opificum*) and mediæval gilds, either with or without the direct cognisance of the State. About the end of the last century, however, the GILDS (*q. v.*) having fallen into decay, and the pressure of competitive industry having been enormously increased by the introduction of new methods of industry and the great extension of British trade, public attention began to be drawn to the hardships endured by workers in factories, and some supervision of them was demanded. At first this attention was concentrated on the new type of factories exclusively, and principally on juvenile labour employed there. (On juvenile employment, see CHILDREN'S LABOUR.) The first Factory Act (42 Geo. III. c. 73), was further restricted in application by being mainly confined to apprenticed, pauper, labour, and absolutely confined to cotton and woollen mills. It was amended from time to time by subsequent ones, 59 Geo. III. c. 66; 60 Geo. III. c. 5; 6 Geo. IV. c. 63; 10 Geo. IV. c. 51; 10 Geo. IV. c. 63, all of which were repealed, however, by 1 & 2 Will. IV. c. 39; which was itself repealed by 3 & 4 Will. IV. c. 103. In this last act a notable advance was made in the principle of factory legislation. It no longer applied exclusively to cotton and woollen mills, but to "any cotton, woollen, worsted, hemp, flax, tow, linen, or silk mill or factory, wherein steam or water or any other mechanical power is, or shall be, used to propel or work the machinery," . . . and it included within its operation, not only apprentices, but all children up to the age of thirteen years and over eight, and others (in subsequent acts denominated "young persons") between the ages of thirteen and eighteen, for all of whom special hours of work were enacted, and, in particular, night work prohibited. This important act was amended and much improved by 7 & 8 Vict. c. 15; and these two statutes constitute together the foundation of the laws at present in force, not alone for the special classes of factories to which they had then exclusive reference, but for all others. By the last-named an elaborate set of regulations was provided for the conduct of factories (still confined to "textile" factories), and female operatives above the age of eighteen years (thereafter called "women") were for the first time put upon the same footing as "young persons." A department of factory inspection was constituted, having a central office in London; and the well-being of the workpeople was aimed at by many minute regulations and in many thoughtful ways.

With the enactment of this statute (1844) the first stage in the progress of English factory legislation may be said to have been accomplished; that stage, namely, which brought the textile industries under some sort of efficient control. For the next twenty years the energy of factory reformers was principally expended

in securing the advantages thus gained and perfecting the system of inspection now fully introduced. To this season belongs, too, the successful conclusion of the long controversy of the Ten Hours' Bill. The demand for a day's work of ten hours, or sixty a week, began as early as before the passing of the act of 1833, which fixed them at forty-eight per week or nine per day, for children from nine to thirteen, and at twelve per day or sixty-nine per week for "young persons" from thirteen to eighteen. By the Factory Act of 1844 these hours were altered to six and a half per day for children between eight and thirteen (not nine and thirteen as formerly), and twelve per day and nine on Saturday for young persons and women (now first included). The object of the agitators was to reduce this number by five hours per week. Such a consummation was apparently achieved by the enactment of 10 Vict. c. 29, fixing them at fifty-eight per week, which, with the shorter time on Saturday, was the equivalent of ten hours' work per day. But in this statute there was a fatal defect. It was not exactly provided when the hard-won ten hours were to be taken—between the extreme limits of 5.30 A.M. and 8.30 P.M.—so that opportunities were offered for evasion, which were only too freely embraced. The remedy was supplied by the Factory Act of 1850, 13 & 14 Vict. c. 54, which definitely introduced the normal working day of twelve hours; six to six, or seven to seven, with one and a half out for meals; thus slightly increasing the full number of working hours per week by two, whilst securing that these should not be exceeded. A subsequent Factory Act (1874) made ample compensation to operatives for any disappointment experienced in this result by reducing the hours in textile factories to fifty-six and a half a week, at which they still remain. During this period (from 1844 to 1864) several valuable new measures were added also to the statute book, some of an amending kind, others distinctly widening the scope of legislation. The first of these was the Print Works Act (8 & 9 Vict. c. 29), applying the principles of the factory acts to print works, as therein defined. This was a very ill-conceived and ill-drawn statute, which was afterwards repealed, and those works were brought under the provisions of 33 & 34 Vict. c. 62. In 1853 and 1856 again further acts relating to factories were passed: the first for the purpose of clearing up some debatable points connected with employment; the latter relating to the fencing of machinery; and in 1860 was passed "An Act to place the employment of women, young persons, and children in bleaching works and dyeing works under the regulation of the Factories Acts" (23 & 24 Vict. c. 78), followed by three amending acts, since repealed, and by the Lace Works Act (24 & 25 Vict. c. 117). But in the meanwhile

the same impulse which had produced these laws had been active also in other directions, and had produced substantial results. As early as 1788 some protection had been afforded to chimney-sweeping boys, and this was extended by other legislation in 1834 and 1840 respectively. In the same year (1840) was issued the first of the great Commissions on the employments of the people, popularly known as the Children's Employment Commissions, one of whose earliest results was the passing of a Mines Act (5 & 6 Vict. c. 99), enlarged and improved (1860) by a subsequent act (23 & 24 Vict. c. 151). Three years later (1863) bakeries were brought under a much-needed supervision by the Bakehouse Act (26 & 27 Vict. c. 40); and in 1864 a whole batch of other industries followed, whose inclusion commences a fresh chapter in the history of English factory legislation.

The Factory Act of 1864, which followed on an early report of the second great Commission of inquiry into the occupations of the people, introduced some startling innovations. Hitherto it had been held, either directly or by inference, that the proper arena of factory legislation was specially the textile industries, or, at most, these and a few others closely related to them; and it had been assumed at all events as a matter of course that *manufacture* was their peculiar sphere. In this view the Print Works Act, and the Bleaching and Dyeing, and Lace Works Acts, had been regarded rather as affiliated than belonging to the Factory Acts, as the Bakehouse Act is to this day. From the Factory Act of 1864 must be dated an entirely new conception of that sphere and this arena. This Act (27 & 28 Vict. c. 48) brought under inspection, not merely several new manufactures in no way connected with textile industry, but certain *employments* as well; and this it did no longer by affiliation, but distinctly by inclusion, thereby formally abandoning the earlier presumptions of what constituted a factory and the proper subjects of factory legislation. The included manufactures were: (a) the manufacture of earthenware, "except bricks and tiles not being ornamental tiles"; (b) the manufacture of lucifer matches; (c) the manufacture of percussion caps; (d) the manufacture of cartridges. The *employments* were: (e) the "employment" of paper staining; (f) the "employment" of fustian cutting. It is clear that the statutory conception of the term factory had hereby undergone a great transformation, and clear also that the present could but be regarded as an instalment of more and larger changes of a like kind to follow. These industries, some of them at least, were not new, the first being possibly the oldest manufacture in the world; nor were they all carried on by novel methods, whether of greatly congregated labour or by means of labour-saving machinery. The operation of fustian cutting, for instance, was a purely manual occupation, largely

pursued in the work-people's own houses; it formed in fact a typical "home industry." Nor was the above presumption falsified by the event. Three years afterwards (1867) the Factory Acts Extension Act (30 & 31 Vict. c. 103), passed the legislature, whereby a still greater number and variety of fresh industries were brought in. Under the comprehensive terms of this statute the designation "factory" obtained a very wide significance indeed. First, it included all previous definitions not specially mentioned in the act; and next some thirty new and specially-mentioned ones. But it included also "*any premises* whether adjoining or separate, in the same occupation, situate in the same city, town, parish, or place, and constituting one trade establishment in or within the precincts of which fifty or more persons are employed in any manufacturing process," this last expression being further defined to mean "any manual labour exercised by way of trade or for purposes of gain, in or incidental to the making any article, or in, or incidental to, the altering, repairing, finishing, or otherwise adapting for sale any article"—than which it would be difficult to devise more inclusive terms. To all appearance it only remained now to legislate for the places where under fifty persons were employed in manual labour to cover the whole field of industrial production. This task was undertaken accordingly, within the same year, by the Workshop Regulation Act (30 & 31 Vict. c. 106), the preamble distinctly stating this to be its object. A set of similar, not the same, provisions were enacted for workshops as for factories, and the new term defined. "Workshop" meant any place, not a factory or bakehouse, where any handicraft was carried on, *in which any child, young person, or woman was employed* and "to which or over which the employer of the persons working therein has the right of access or control"; so that workshops employing only adult men were, unlike factories, exempt, and places to which work was taken home to be done were likewise unregulated. With the enactment of these two statutes factory legislation in England theoretically reached the highest point of efficiency that it has yet touched.

But in practice this efficiency was not so apparent. The administration of the Workshop Act had been confided to local authorities, and these almost universally refused or failed to put the law in operation. After three years of unsuccessful trial it was handed over to the inspectors of factories, and seven years afterwards (1878) the two acts were incorporated under the title "Factory and Workshop Act" (41 Vict. c. 16). Unfortunately, whilst so incorporated, the purely artificial distinctions between factories and workshops were retained, whence arises much of the confusion which still encumbers the treatment of this subject, and constantly thwarts the best endeavours of legis-

lators to remove. Repeated inquiries, by parliamentary committees and otherwise, have but succeeded hitherto in making those inconsistencies more apparent, and the remedies applied of demonstrating the impossibility of fixing a complicated mass of legal regulations on a sound basis by means so empiric as those adopted. The act of 1878 deals with five classes of works:—Textile factories, non-textile factories, workshops, workshops in which neither children nor young persons are employed, domestic workshops. By its definitions a “factory” is a place in which machinery is moved by the aid of steam, water, or other mechanical power, and factories are divided into two classes, textile factories and non-textile factories; the words textile factories and non-textile factories being now first used in an act of parliament. The definition of a textile factory remains the same as under former acts, and the regulations affecting them continue the same, as to hours of work and meals, education of children, limewashing, holidays, etc. The term “non-textile factory” applies to the occupations enumerated in the acts of 1864 and 1867 respectively, whether having mechanical power or not, and includes in addition all unnamed occupations in which such power is used. This definition releases from the special factory regulations all those occupations which were factories under the Factory Act 1867 by reason of fifty persons being employed, and in which mechanical power is not used, which therefore become workshops. The works which are specially named as non-textile factories under the act of 1867 are:—Blast furnaces, copper mills, iron mills, foundries. The manufacture of machinery, of any article of metal, or of india-rubber or gutta-percha, by the aid of mechanical power. Paper manufacture, glass manufacture, tobacco manufacture, letterpress printing, bookbinding. All unnamed occupations in which power is not used, except those specially named in the acts of 1864 and 1867, are workshops as above. In these the hours of work and meals, the sanitary condition, and education, are as strictly provided for as in factories, but unless circumstances satisfy the secretary of state that they are required, registers, and certificates of fitness for young persons and children, obligatory in factories, will not be compulsory. The next class of works, to which fewer regulations apply, are the workshops in which none but women above the age of eighteen are employed. In these workshops the actual time of work and of meals must be the same as in non-textile factories, but with more elasticity of arrangement, and the sanitary condition is to be cared for by the sanitary authority. The last class of works is designated “domestic workshops.” These exist where work is carried on in a private house, room, or place, in which the only persons

employed are members of the same family dwelling there. In them the actual hours of work and meals for children and young persons must be the same as in non-textile factories, but with more elasticity of arrangement; the education of children is on the same plan, and the sanitary condition is cared for by the medical officer of health. The employment of women in domestic workshops is unrestricted. But the act exempts even from such regulations as apply to domestic workshops, and leaves altogether free from this act certain occupations of a light character when carried on in a dwelling-house by the family dwelling there, viz.:—Strawplait making, pillow-lace making, glove making, or others of a like nature to which a secretary of state may extend the exemption. It also exempts from the regulations as to hours of labour and meals, flax scutch mills in which women only are employed intermittently, and for not more than six months in the year. It also exempts any handicraft which is exercised in a dwelling-house by the family dwelling there, at irregular intervals, and does not furnish the whole or principal means of living to the family. Quarries are brought under inspection by this act, either as factories or workshops; and *pit banks*, that is, all parts of a metalliferous mine not subject to the provisions of the Metalliferous Mines' Act.

Since this act has been in operation another important Factory Act (54 & 55 Vict. c. 75) has been passed (1891), in addition to several minor ones. In the act of 1891 some disposition is shown to return to the method of inspection under the Workshop Act, which placed the administration of the law in the hands of local authorities. In both of them a decided retrogression is shown from the strong position occupied by the dual acts of 1867. This is principally apparent in the multiplication of different classes of protected places and the multiplication of authorities having legal cognisance of them. In the meanwhile several cognate acts have also found a place in our statute book; dealing with shop labour, with the injection of steam in cotton factories, the abuses of the Truck system, the protection of children employed in theatres, with bakehouses, white-lead works, etc.; most or all of which are conventionally understood as being included under the general designation factories, and are either wholly or in part under the jurisdiction of the inspectors. Nor has this tendency to spread the utility of factory legislation by the fiction of conceiving of almost any and every occupation as carried on in a factory, reached its probable limit yet, and it is not easy to predict at what point it will do so. The continuous success that has hitherto waited on all these experiments is a strong practical argument in their favour, and the inconveniences which have resulted are not so distinctly of the kind

that enlists general sympathy as to call for any very strong protest against them. Only it should surely not be beyond the bounds of legislative capacity to retain what is good in the present arrangement while eliminating what is faulty, —to secure that a reasonable and consistent technology should replace the present unreasonable one, and a real, not nominal, harmony pervade the whole body of law.

The history of factory legislation abroad is to a large extent but a repetition of the story that has now been told. In other countries, as in England, the pressure of competition, and the novel circumstances brought about by greatly subdivided labour and the increasing use of machinery, have necessitated some counter impulse to neutralise the worst evils which have everywhere been found to accompany the advantages of this great industrial change. In other countries, too, the counter impulse has been usually supplied from the central power of the state. As was also natural the example of this country has been, in a great number of instances, closely followed at first, England being the country that not only had earliest made trial of the new experiment of the factory system itself, but on its greatest scale. Thus foreign factory acts have followed pretty closely the lines of English ones, commencing with partial legislation for only textile fabrics, and proceeding afterwards to other industries. But this rule is not universal. In some countries where remedial measures were late in being adopted, the course pursued has been of a more logical kind, and our more palpable errors have been avoided. Partly on account, no doubt, of the useful object-lesson which they provided; partly, also, from a greater freedom from that tyranny of precedent and mere words, which is so marked a national characteristic here, they have in many cases kept themselves much clearer of inconsistencies and contradictions.

Prussia was the first country of Europe to adopt the principle of the English factory acts, in a law dated the 9th of March 1839, imposing certain restrictions on the employment of young persons and children in textile manufacture. Other states of Germany followed intermittently: Bavaria in 1840, Saxony not till 1861, the North German Confederation in 1869. There is now a general law of a comprehensive kind, embracing the whole German empire. France was but little behind Prussia. The first factory act was enacted there in 1841. Sweden was comparatively early in the field (1846); Norway much later (1860). Austria promulgated her first factory act in 1859; but Hungary not till 1872. Only quite recently have Belgium and Holland moved in the matter, but much has been done of late by these countries to make up for lost time. In Switzerland a few cantons led the way in 1862; others have followed since; and factory legislation is now

general. Neither in Italy nor Spain has much been accomplished, but Portugal since 1888 has entered heartily on the path of regulation. In Russia there has been a factory act in force since 1881. The United States of America have no general system, but different states provide for their requirements by different laws, while a few are still without any. In India there is a factory act, but a very inefficient one from our point of view. In the civilised parts of Australia one of a very comprehensive kind is in operation, and an extremely stringent one has been in force in New Zealand since 1873.

[George Jarvis Notcutt, *The Factory and Workshop Acts* (Stevens and Sons, 1874).—Alexander Redgrave, C.B., *The Factory and Workshop Acts*, 4th ed. (Shaw and Sons, 1891).—Ernst Adler von Plener, *The English Factory Legislation* (Chapman and Hall, 1873).—R. Whately Cooke-Taylor, *The Modern Factory System and Introduction to a History of the Factory System* (Bentley and Son, 1886, and Kegan Paul and Co., 1891).—Victorine Jeans, *Factory Act Legislation* (1892); being the Cobden Club Prize Essay for 1891, and describing legislation from 1850.—W. Stanley Jevons, *The State in Relation to Labour* (English Citizen Series, 1882).—Karl Marx, *Capital*, English translation (1887).—Edwin Hodder, *Life of Lord Shaftesbury* (Cassell and Co., 1886).—Philip Grant, *History of Factory Legislation* (1866).—"Alfred," *History of the Factory Movement* (1857); down to the passing of the Ten Hours' Bill.]
W. C. T.

FACTORY LAWS IN THE UNITED STATES. The regulation of factory labour in the United States is not a subject of federal, but of state legislation. Consequently there is no uniformity in laws of this character. Some states have progressed much farther than the rest, and are much more active in the execution of the laws. Massachusetts on the whole has taken the lead, while New York, Ohio, New Jersey, and Pennsylvania have advanced in the same direction. In Massachusetts the first law regulating the hours of labour was passed in 1874, making ten hours a legal day for women and children. This was followed by the act of 1877, which provided for the guarding of belting, shafting, gearing, etc., in factories. Members of the state police are detailed to act as inspectors. The act of 1886 provides for weekly payment to operatives employed by corporations. By other legislations night labour is forbidden for women and children, and the time of meal hours is governed. There are numerous other provisions, similar, however, in most respects to factory legislation in England. In 1892 a further reduction of hours, to 58 per week, was made. As yet no attempt has been made in any American state to regulate the hours of male adults. In a few of the states women are employed as inspectors. The labour laws of Massachusetts may be found in the *Annual Report of the Bureau of Labour of Massachusetts* for 1890.
D. R. D.

FACTORY SYSTEM. "The term Factory System designates in technology," says Dr. Ure (*Philosophy of Manufactures*, pp. 13, 14), "the combined operation of many orders of workpeople, adult and young, in tending with assiduous skill a series of productive machines continuously impelled by a central power." It includes, he continues, "such organisations as cotton, flax, silk, and wool mills, and also certain engineering works," but it excludes "those in which the mechanisms do not form a connective series, and are not dependent on one prime mover," . . . such as "iron-works, dye-works, soap-works, brass foundries, etc." "Some authors indeed," says Dr. Ure, "have comprehended under the title factory all extensive establishments wherein a number of people co-operate towards a common purpose of art, and would therefore rank breweries, distilleries, as well as the workshops of carpenters, turners, coopers, etc., under the factory system. But I conceive that this title in its strictest sense involves the idea of a vast automaton, composed of various mechanical and intellectual organs, acting in uninterrupted concert, for the production of a common object, all of them being subordinated to a self-regulated moving force." "If," he concludes, "the marshalling of human beings in systematic order for any technical enterprise were allowed to constitute a factory, this term might embrace every department of civil and military engineering—a latitude of application quite inadmissible." It has been shown already (see FACTORY ACTS) that many of the work-places enumerated by Dr. Ure as "quite inadmissible," have, nevertheless, been since included in the statutory term "factory," and many others under the cognate term "workshop." Moreover his definition is inconsistent with itself, and too recondite for ordinary use. "An automaton composed of various mechanical and intellectual organs, acting in uninterrupted concert," is a definition of the factory system which, even if technically correct, would be of little practical use. A more recent writer, Hon. Carroll D. Wright, special agent of the U. S. government, who some years ago conducted an elaborate investigation into the origin and working of the factory system in America and this country, approaches much nearer a proper conception of the subject (*Report on the Factory System of the United States*, Washington, 1884). "A factory is an establishment where several workmen are collected for the purpose of obtaining greater and cheaper conveniences for labour than they could procure individually at their homes, for producing results by their combined efforts which they could not accomplish separately and for preventing the loss occasioned by carrying articles from place to place during the several processes necessary to complete their manufacture. The principle of

a factory is that each labourer, working separately, is controlled by some associating principle which directs his producing powers to effect a common result, which it is the object of all collectively to obtain."

The factory system is therefore a system of production carried on in establishments such as these, and a factory must be defined to be an *establishment*, as laid down by Mr. Wright; not a series of productive operations, which appeared to be the idea of Dr. Ure. It is a concrete fact, a *place* of definite and assured bounds. In such places, then, a mode of industry is carried on that differs, and differs even greatly, from what is carried on in other places. Now wherein does that difference consist? Not exclusively in those facilities of manufacture; some of which Mr. Wright has pointed out; certainly not—economically considered—in the circumstance of a greater or less quantity of machinery being used there, or no machinery at all, nor because of any manner of setting or not setting such machinery in motion (which is the distinction of the current Factory Acts). The difference in the social relation resides in the part allotted to labour under it, and in the purely economical relation in the amount, not the nature, of the product. Under a system of manufacture not so carried on the labourer is master of the industry; he is the prime mover in the enterprise; the active centre of the productive act. In manufacture carried on by factory methods he is this no longer. Where machinery is employed, his duty is principally to keep that going, to feed it, clean it, connect it with some exterior motor, and remove the manufactured commodity from it; or where machinery is not employed, he replaces it. He is then but a portion of the producing organism; whose component subdivisions are partly animate and partly inanimate, and whose initiative is supplied from outside; and in this case he is but an adjunct in the general result. He must go altogether with that method of production or withdraw altogether from it; he cannot choose his time or place of work within it, or choose or venture anything. Such is the position of the labourer towards the system; his attitude towards the product has undergone a great change too. Formerly this relation was intimate. He had actually made it, or part of it; an appreciable quantity of his own personality, of his "labour force," had passed into it; it was *of*, even if not *belonging* to him. It is both of and belonging to the system now. A similar transformation marks his position towards the producer. This also under the smaller system of production was intimate, and is so no longer; the great combinations of labour characteristic of the new method, and the great capitals requisite in manœuvring them, rendering each individual human instrument of comparatively

small account. The organism is the supreme object of concern, and hence the relation of the worker to the producer tends to be as remote and impersonal as his relation to the system and the product.

But although machinery, automatic or otherwise, is no necessary feature of the factory system, it was, undoubtedly, the great spread of mechanical invention, and its application to purposes of industry, that fostered its modern growth; just as it was, undoubtedly, the application of the motive power of steam which conferred upon it its most characteristic new form. That the already existent factory system would have continued to spread had these events not occurred is practically certain in view of the industrial history of the time, but no less certain that it would not have spread so rapidly and so much; and it is a natural subject of interest, therefore, at this stage of development—when it begins already to show some signs of entering on a new phase—to inquire what are the most conspicuous economic results that have proceeded from it thus far. The most conspicuous of all results is the immensely increased production of which it has been the instrument; but this is one so patent, and which has been so often the theme of eulogy, that it does not seem necessary to descant upon it here. It will be more to the purpose in such an undertaking as the present to consider to what extent the human agents of production have been affected, and through them the economic position and prospects of the community at large.

It may be said at once, then, that many dismal prophecies which accompanied the unusual development of modern factory labour during its initial period have not been hitherto fulfilled. The factory population has not become less moral during that period, but more moral; not less religious, but more religious. The criminal statistics of factory districts may be appealed to with confidence on the first head; and on the second we have the conclusive evidence accumulated by Sir Edward BAINES (*q.v.*) in a remarkable pamphlet published in 1843, called *The Social, Educational, and Religious State of the Manufacturing Districts, with Statistical Returns* (Simpkin and Marshall), wherein it is shown that in the four typical manufacturing counties of Lancashire, Yorkshire, Cheshire, and Derbyshire, the proportion of sittings in church and chapel to the population was much greater than in—for instance—London, and the proportionate advance in the provision of new sittings during the typical factory period 1801 to 1841 far more rapid. It has not become less intellectual but more intellectual. For, first, the Factory Acts and Elementary Education Acts have secured better instruction; and, next, it is clear from the quantity and quality of literature circulating in factory districts that opportunities of intellec-

tual culture are more appreciated now than formerly. Moreover, it was actually owing to the opportunities afforded by the factory system that the first trial of compulsory education was made in this country through the preliminary medium of the half-time system. Its effect on public sanitation has been good. The large spaces and highly-organised conditions required for the successful prosecution of factory labour might, in any case, have been expected to secure this, and it is further provided for by statute. A physical deterioration has been assumed among the operative population, but this remains to be proved. It is an assertion easily made and readily believed; but is in direct opposition to the opinion of some of the most acute and unprejudiced observers, like Mr. Carroll Wright, and M. Louis Reybaud, the well-known French statistician, who have minutely investigated the facts. Or, if that deterioration be allowed in the case of male operatives compared with the race of domestic manufacturers whom they superseded, the same should not be lightly assumed to apply to women. No one familiar with the textile industries of the north of England can have failed to notice the robust type of women employed there, presenting an especially striking contrast with the equivalent class among sempstresses, domestic servants, or the female population of agricultural districts. Mr. Wright declares the women factory workers in France and Germany to be far superior in physique to those who are employed in workshops, and holds the same to be true both of America and England. Neither, it appears, is it the case that the children of these women are degenerate when compared with the children of others at work at other occupations, or compared with children of wholly unemployed mothers (of the same class), or that infant mortality is higher in factory districts than elsewhere. Mr. Cooke-Taylor has even gone the length of arguing that the opposite is true (see *Transactions of the National Association for the Promotion of Social Science*, 1874 and 1882; *Fortnightly Review*, May 1875; *Contemporary Review*, September 1882; *Modern Factory System*, pp. 408, 423), and has produced a long array of statistics in support of the contention. As for the further question—more social than economic—of the degree in which family life has been affected by the factory system; that is again of wider import than appears at first sight. It is allowed that the arena of productive labour, especially in the greater industries, has been largely transferred from the home to the factory; but is that necessarily an evil? Is it not even what some of our philanthropists are crying out loudly for at the present time? It is true, too, that the factory system fosters independence of character among the young, and has a tendency to break down the old organisation of the domestic circle.

But independence of character may be a gain, not a loss, when not pushed to illegitimate excess; and all modern experience is in favour of limiting the power of parents over their offspring. We have probably not yet seen all that the factory system portends in this connection, just as we have not yet seen the ultimate lineaments of that system itself; the present is a time of rapid transition in labour relations, and it may be well to wait for further readjustments before pronouncing hastily on this and some kindred points.

Some of the more apparent results may, nevertheless, be indicated. How has the factory system affected the relations between capital and labour; and what is its attitude towards the consumer? We have noticed its effect on the relations between employer and employed: it has diminished the intimacy that formerly subsisted between these partners in production. It is much to be feared that its action in the mass has followed the same course as its action in individual instances. It is alleged that capital has not become more, but less, careful of the interests of labour, that labour is not more, but less, careful of the interests of capital; and that even in disputes between the two the aim of each side is sometimes openly proclaimed to be the ruin of the other; what is more apparent, in almost every dispute, is the utter indifference of both to the welfare of the consumer. This was not so always. The guilds and medieval trade societies, whether of masters or men or both combined, were as careful to make rules against bad workmanship as against bad workers or harsh masters; they were not formally constituted on a purely selfish basis. These are not exclusively the results of the factory system; they are determined by the fierce competition that rages throughout all modern industry; but it must be said of it, at least, that it has never done anything of its own instance to moderate this struggle, while much in its methods inevitably tends to aggravate it.

There is one result, though but an indirect one, which must be set unequivocally to the credit of the modern factory system, and which will remain long after the present form of it has passed into that oblivion which is likely to be its final home. It was the originator of the Factory Acts. By concentrating the evils of competitive industry, it drew public attention to the cruelties of which that vast influence for good was capable, and caused to be set in motion a body of laws of exceptional humanity, whose purpose is to counteract them. The political economy of the future has no worthier task before it than the harmonising those laws with its own principles, the defining their proper sphere of influence, and the guiding their free extension towards just and legitimate ends.

[Andrew Ure, M.D., *The Philosophy of Manufactures* (Bohn's ed., 1861).—Charles Babbage,

Economy of Machinery and Manufactures, 4th ed. (Murray, 1846).—"Alfred," *History of the Factory Movement* (Simpkin and Marshall, 1857).—Karl Marx, *Capital; A Critical Analysis of Capitalist Production*, vols. i. and ii., English translation (Swan Sonnenschein, 1887).—R. Whately Cooke-Taylor, *Introduction to a History of the Factory System* (Bentley and Son, 1886); *The Modern Factory System* (Kegan Paul and Co., 1891).—Carroll D. Wright, *Report of the Factory System of the United States* (Washington, Government Printing Office, 1884).] w. c. r.

FACTS. In political economy all true theory depends on facts. But the dependence is not always of the same sort. It may be immediate or through a chain of deduction. Thus when Carey maintains that settlers in a new country cultivate the worse lands first, he depends upon comparatively direct evidence; whereas a critic of Carey's theory brings to bear deductively more general facts of human nature when he humorously doubts whether a settler, having a choice between two equally accessible pieces of land, would reject the better as being too good for the "likes of" him. When the two sets of facts, the general and the special, are consistent, there is the strongest evidence (Mill's *Logic*, bk. iii. ch. xi., bk. vi. ch. ix. x.) When they seem to conflict, care is required to interpret fact by theory and to correct theory by fact. The danger of resting exclusively on abstract reasoning has been shown under the head of DOCTRINAIRE. The converse fallacy, to which the "practical man" is liable, may be noticed here.

"Facts by themselves are silent," says Prof. Marshall (*Principles of Economics*, bk. i. ch. vi. § 3); "they teach nothing until they are interpreted by reason." They are often only "half facts": for instance, the local variations of wages adduced as a fact proving that there is little competitive mobility among the working-classes; the explanation of the fact being that there is a difference of efficiency between the working-classes in the compared districts (*id.* bk. vi. ch. iii. § 2). The reckless use of facts is well exemplified in the controversies about free trade. Many instances of blindly following the suggestion of facts are contained in Tausig's *Tariff History of the United States*. The same facts have been used to prove that raising the tariff increases and that it diminishes prosperity. "One disputant ascribes to a recent lowering of the tariff a result which another says was part of the effect of a raising of the tariff that occurred some years before" (Marshall, *Present Position of Economics*, p. 43). "The most reckless and treacherous of all theorists is he who professes to let facts and figures speak for themselves, who keeps in the background the part he has played, perhaps unconsciously, in selecting and grouping them" (*id.* p. 44). Much the same view as to the need of combining facts with theory is presented by Dr. Sidgwick in his

Scope and Method of Economic Science, Professor Wagner in a communication to the *Quarterly Journal of Economics*, October 1886, and other high authorities living and dead—pre-eminently Mill in his *Logic and Unsettled Questions*. A lively statement of the truth here emphasised is contained in Lunt's *Economic Science* (Questions of the Day), 1888.

[Consult also Keynes, *Scope and Method of Political Economy*.] F. Y. E.

FAILURE. See BANKRUPTCY.

FAIR PRICE. The word "fair," when used in reference to economic matters, has rarely a scientific meaning. On the assumption that a fair price is one just both for buyer and seller, the proper definition is that it is that price at which the same quantity of a commodity is offered for sale and demanded. It must be observed, however, that the term is in practice never used in this signification. Indeed, it is chiefly met with in discussions on questions relating to land; where it is generally used, not in consonance with, but in contradistinction to, the above definition. The received and now statutory term "fairrent," is perhaps responsible for this use of the term, and in the case of rent of land, as of land itself, there is a possible scientific meaning attachable to the phrase which is not the meaning commonly associated with it. In fact, fair price has come to be applied exclusively to those commodities in which, through some form of monopoly, it is thought that one party to the bargain of exchange has an advantage over the other if the laws of supply and demand are left to work out the price without interference. Thus when it is said that public bodies ought to be allowed to acquire land compulsorily for a fair price, the meaning conveyed is that a computation based on the market value of the land is too high and therefore unfair. A fair wage, it may be noticed, is merely a fair price for labour, and is generally used without reference to the state of trade or of the labour market, but on the assumption that without some interference with the contract for the hire of labour the wage paid will be too small for the proper sustenance of the workman. Such a term, however, is not properly economic (see *JUSTUM PRETIUM*). M. G. D.

FAIR RENTS. Fair rent, like the similar expressions "fair wages," "fair price" (*JUSTUM PRETIUM*, *q.v.*), is used to convey an ethical judgment on an economic fact. Applied in a primitive community, it means the customary or usual rent of land, especially when held by a member of the group (Maine, *Village Communities*, p. 187). Again, like fair wages or price, it implies the idea of an amount that will allow the person interested to live—the rent under which a tenant "can live and thrive." The development of economic science brought about the identification of fair rent

with competitive or Ricardian rent as paid by a capitalist farmer,—the surplus remaining after expenses of production, ordinary profit included, have been satisfied. Lastly, Mill and his leading disciple Cairnes were led from their study of the Irish land question to separate competitive from fair rent in the case of cottier tenants, and to regard the latter as being equivalent to "economic" rent, from which under the pressure of demand the actual rents paid by the cultivators were likely to diverge. "Economic rent," says Cairnes, "is no other than the fair valuation rent of the good landlord. The fair valuation rent of the popular platform admits, in short, of being reduced to strictly scientific expression" (*Essays in Political Economy*, p. 205). Where competition fails to secure justice the intervention of an external authority becomes necessary. According to Mill rent paid by a capitalist . . . may safely be abandoned to competition; rent paid by labourers cannot. . . . Peasant rents ought never to be arbitrary . . . either by custom or law it is comparatively necessary that they should be fixed" (*Principles*, bk. ii. ch. 10, § 1).

The Report of the Bessborough Commission in 1881 (C. 2779) accepts this view, arguing that there is no "freedom of contract" between landlord and tenant (p. 21) and recommends that fair rents should be fixed "by a constituted authority" (p. 19), and proceeds "to negative the idea that such rent means what in England is known as a full or fair commercial rent, but in Ireland as a rack-rent" (p. 23).

The Irish Land Act of 1881, avowedly based on the Report of the Bessborough Commission, is in fact the legislative enactment of Cairnes's theory as to Irish land rents. It creates a tribunal for the fixing of fair rents, a term which is not further defined, and lays down that the court, "after hearing the parties and having regard to the interest of the landlord and tenant respectively, and considering all the circumstances of the case, holding, and district, may determine what is such fair rent" (44 & 45 Vict. c. 49, § 8).

This measure, which became law on 22nd August 1881, applied to yearly tenancies only; and pastoral holdings over £50 valuation, were excluded from its operation. By an act of 1887 (50 & 51 Vict. c. 33) leaseholders for less than 99 years were admitted to the privilege of having a fair rent fixed.

During the ten years ending 22nd August 1891, fair rents have been fixed or arranged in 277,160 cases, affecting 8,316,878 acres, being over two fifths of the area of Ireland. In these the former rents come to £5,739,153:3s., the new judicial or fair rents £4,548,147:2:8, showing a reduction of £1,191,006:0:4 or 20·7 per cent. Fuller details are given in the following table.

Table showing the Operation of the Irish Land Acts 1881 and 1887, for the ten years ending 22nd August 1891.

Method of Settlement.	Number of Cases.	Area Affected.	Tenement Valuation.		Former Rents.		Judicial Rents.		Percentage Reduction.
		Acres R. P.	£	s. d.	£	s. d.	£	s. d.	
Rents fixed by Chief and Sub-Commissions (yearly tenancies)	124,451	3,641,428 3 27½	1,824,080	2 10	2,378,293 16 5½		1,875,021	19 5	21.2
Rents fixed by Chief and Sub-Commissions (leaseholds) four years ending August 22nd 1891	20,883	1,212,604 3 18½	756,164	10 4½	1,048,756	15 9½	786,322	18 9½	25.0
Rents fixed by Civil Bill Courts (yearly tenancies)	12,078	306,534 1 22½	145,589	12 8	194,295	10 10½	149,502	7 6½	23.0
Rents fixed by Civil Bill Courts (leaseholds) four years ending August 22nd 1891	1,622	69,223 0 18½	45,700	13 7	63,707	13 4½	45,851	16 1	28.0
Fixed by Court Valuers	1,306	55,856 2 38½	26,740	12 5½	36,451	19 8	29,441	3 5	19.4
Fixed by Agreements, registered with Commissions	109,738	2,845,165 2 4½	1,573,191	5 2½	1,892,978	17 0½	1,559,188	10 3	17.6
Fixed by Agreements, registered on Civil Bill Court	7,030	182,866 1 11½	94,892	17 0	121,566	16 0	100,623	0 7	17.2
Arbitration under Commissions	35	2,719 1 29	1,880	0 0	2,567	5 8½	1,854	17 8	27.7
Arbitration under Civil Bill Courts	2	469 1 24	352	10 0	544	8 1	340	0 0	37.5
Total	277,160	8,316,878 3 5½	4,468,412	4 1½	5,739,153	3 0	4,548,147	2 8	20.7

Under the Act of 1886 (49 & 50 Vict. c. 29) a commission has been appointed to fix fair rents for the crofters in six northern Scotch counties (see F's, THE THREE).

[H. S. Maine, *Village Communities*, Lecture VI.—J. E. Cairnes, "Political Economy and Land" in *Essays in Political Economy* (1873). For the details of fair rents in Ireland and Scotland, the successive *Reports of the Irish Land Commission and the Crofters Commission*.] C. F. E.

FAIR TRADE. A term recently brought into use in antithesis to **FREE TRADE** (*q.v.*) and applied to commerce on which no restriction is imposed by either party or on which equal restrictions are imposed by both. The fair trader regards reciprocity as being essential for fair exchange, and looks on the English system as "one-sided free trade." In consequence of trade depression the Fair Trade League was founded in 1881 to advocate (1) the use of retaliatory duties against countries that tax British exports, and (2) the closer fiscal union of Great Britain and the colonies. The germ of fair trade ideas is to be found in the work of **TORRENS** (*q.v.*) entitled *The Budget*.

[T. H. Farrer, *Free Trade versus Fair Trade* (4th ed.), 1887.—C. J. Fuchs, *Handelspolitik Englands*, Leipzig, 1893, pp. 157-172 (see **RETALIATION**), and the publications of the Fair Trade League.] C. F. E.

FAIRS AND MARKETS, THE DEVELOPMENT OF. Before discussing the history and development of fairs and markets in this country, it will be useful to define the meaning of the terms according to the law. "A market, viewed in its strictly legal aspect, may be defined as an authorised public concourse of buyers and sellers of commodities, meeting at a place, more or less strictly limited or defined,

at an appointed time." "A market right is a franchise or privilege to hold a market: to this is generally attached the right to levy tolls and other dues." "A fair has been described as a larger market. Thus in *Comyns' Digest* we have the following definition. 'Every fair is a market—not *à contra* therefore when any statute speaks of a fair, a market should also be comprehended.' "The specific difference between a fair and a market appears to be that a fair is held less frequently, it generally extends over a longer continuous period, and is of a more miscellaneous character than a market." The above definitions are taken from the final Report of the Royal Commission on Market Rights and Tolls (1887-1891). A few comments will serve to explain these definitions. "A market is a public concourse." Therefore a private meeting of traders—as for instance in many so-called corn-markets—is not a market at all; nor are the auction-marts, which are now so frequent throughout the country for the sale of cattle, in any proper sense of the term cattle-markets. "The place of meeting must be more or less strictly limited or defined." The owner of an English market has exclusive possession for market purposes of an area—it may be a manor, or it may be a township—and within that area he is entitled to shift his market from place to place; beyond the limits of the area he cannot move. "The meeting must be at an appointed time." Market days are fixed either by the terms of the grant which creates the market or by length of usage; and the general law is that a change of the day without the consent of the crown will forfeit the right to hold the market. "A market right is a franchise." A franchise is a royal prerogative and is one of those *jura regalia* which the king, if he think fit, can grant

to a subject. No English subject therefore can hold a market unless he can show a grant of this monopoly by letters-patent or such long enjoyment of the right that it will be presumed that a grant was made to him at an early period and has since been lost. "The right to levy toll and other dues" is not a necessary incident of a market. Free markets exist in many places in England, as for instance at Chippenham in Wiltshire. The right to keep standard weights and measures, to hold a market court, and to sentence offenders to fine or pillory, were parts of the privileges of market-owners in the past. Markets are seldom held less frequently than once a week; fairs are seldom held more frequently than three or four times a year. It seems tolerably certain that in origin fairs and markets are distinct. The fair is a holiday or "wake" or festival of a saint, which is incidentally utilised by the itinerant trader for purposes of gain. The name is probably derived from the Latin *feria* (a holiday), and a fair in Brittany at the present day would show us with tolerable accuracy what an English fair was before the Reformation. A market, on the other hand, comes into existence for the express purposes of trade. The Latin name (*mundine*) shows that under the Romans a market was usually held once in their nine-day week. From these considerations we can understand why we find in England what are called "pleasure fairs," while such a thing as a "pleasure market" is unknown.

Fairs.—Dealing in the first instance with fairs, it would appear that before the Norman Conquest the ownership of a fair was not a matter of great value. It is observed in an antiquarian report forming the first volume of the proceedings of the royal commission of 1887 that "there are only two notices of fairs in Domesday Book, namely, the mention of the third part of a fair at 'Aspella' in Suffolk and of the *forum annuale* held by the Earl of Moretain at 'Matele' in Cornwall;" and that "even in these instances there is no estimate of annual value, as is usual where markets are described."

The trade of England developed rapidly after the Norman Conquest and under the Plantagenet kings, and its development took a shape which led to the great development of fairs in the direction of trade. It was a natural result of the kingdom of England and duchy of Normandy being in the same hands that trade across the English Channel should become larger, and in Plantagenet times this connection with Europe increased still further, not only on account of the extended possessions of our kings in France, but also by reason of the genius for commerce which more than one of them displayed. For such a foreign trade, at a time when the means of communication were imperfect, the system of fairs was a godsend. The

fixed dates at which the fairs were held enabled the merchant or dealer to arrange his circuit with certainty; and thus, at a fair, merchandise would be found which was necessarily absent from the weekly market; or, as the late Professor Rogers expresses it, the fair was "a market in which goods which could not be found in the ordinary town market would be procurable, and in which there would be a wider market for ordinary goods." The same writer gives us a picture of the great fair of Stourbridge near Cambridge, which it is impossible to read without wonder at the present day. The day of the proclamation of the fair was 4th September. On 8th September the fair was opened and lasted for three weeks. "The temporary wooden buildings were commenced by custom on St. Bartholomew's Day, 24th August, and the builders of these houses were allowed to destroy corn grown on the spot with impunity if it were not cleared before that time. The space allotted to the fair, about half a square mile, was divided into streets which were named sometimes by nations, and in each of these streets some special trade was carried on, the principal being foreign spices and fruits, ironmongery, fish, metal goods, cloth, wool, leather, and latterly books." At this fair, as we learn, there would be found traders from the Levant, from Genoa, and from Venice, "war-horses and jennets from Spain, and iron from Seville."

For securing merchants and their goods from robbery and violence we find that from the earliest times a special "peace" was enforced which in course of time came to afford protection to all minor offenders who could find sanctuary within the limits of the fair. A quotation from the Scottish *Leges Quattuor Burgorum* will illustrate this practice.

"This is the ordinance of the peace of fairs in a royal burgh on the hither side of the water of Forth, to wit; That from the time when the peace of the fair is proclaimed, no man be taken nor attached within the time of that fair, either in coming to the fair or in passing thence or in sojourning in the fair itself; unless he has broken the peace of the fair, or unless he be an outlaw of the Lord King or the King's traitor, or such a misdoer as the peace of Holy Church ought not to save. And if he be such a misdoer, or have broken the peace of the fair, he shall be attached securely until the mort of that fair, and there he shall stand for his right, and justice shall be done in the matter whereof he has been charged."

During the continuance of the fair, then, the ordinary executive and judicial officers of the place were ousted of their jurisdiction and were replaced by the officials of the owners of the fair. In the court of PIE-POWDER (*q.v.*) (*pieds poudrés*) the "dusty-feet" or travelling dealers found a substitute for the ordinary courts of law. There is nothing strange in the lord of the fair thus

usurping the position of the ordinary magistrate; for no principle is more firmly fixed in old English law than the doctrine that ownership of land carries with it the right to hold courts of justice within its limits; and of this doctrine the court of "pie-powder" forms a typical illustration.

The legislation of Edward I. and Edward III. did very much to make the conduct of trade more easy, to prevent the encroachments of middlemen, and to substitute for the special privileges and usages of particular districts a general system of trade for the whole country. Slight reflection will show that the more secure and definite ordinary commerce becomes, the less are periodical fairs required. If the single trader can readily go through the country from day to day, there is no necessity for his customers to come together at stated intervals to meet him. "The development of the craft-gilds operated upon the fortunes of fairs from another side. And thus they have long ceased in England to be of importance for trade purposes. Pleasure fairs have also sunk very low. An act of the present reign, reciting that they are often the cause of "grievous immorality," gives power to the Home Secretary to abolish any fair with the consent of the owner. The country would probably suffer very little if all purely pleasure fairs were done away with.

Markets.—Markets, so far as we can judge, were far more numerous and valuable than fairs during the period before the Norman Conquest. The century which followed the taking of the Domesday Survey was a period of remarkable development in town life. The town-gilds, which were one of the outcomes of this development, had for their business "the framing and enforcing a sort of market law—seeing to the weights and measures in use, taking measures for securing and evidencing by their trade-marks the quality of goods exported from the town." The town-gild was in many cases the authority which fixed the ASSIZE OF BREAD AND BEER (*q.v.*), that is to say "the sliding scale by which their values were adjusted as corn varied in price."

The accession of Edward I. is a crucial period in the history of markets. Finding that during his father's reign the rich nobles had in many places usurped the royal rights and abused them for the oppression of the poor, he sent commissioners throughout the country, to inquire in every "hundred" of each shire what were the king's lands and the king's rights there. The results of this remarkable inquiry were recorded in rolls called the HUNDRED ROLLS (*q.v.*), and of these rolls those which relate to seven of the counties still survive. They show by their extraordinary detail how special jurisdictions and special exemptions were spread like network over the country, which must have been most prejudicial to the interests of trade. It was these varieties of local usage, and the abuses

they engendered, which Edward I. had to meet by statutes which should apply to the whole realm. Two or three illustrations may show the nature of the evils he had to remedy; their extent may be appreciated when we remember that during the period of seventy-four years, which preceded the commencement of Edward's reign, John and Henry III. had made grants of about 1500 new markets and fairs. The first instance comes from the county of Berkshire, and records that "the burgesses of Wallingford were not accustomed to take toll save only of merchants, but now, contrary to their ancient franchise, they take toll of the men of the country who buy corn and other victuals for their household supplies." In Derbyshire "the masters of the hospital of Yeveley appropriate and attach to themselves men of the royal borough of Assheburn—whereby the king loses toll and passage. And the same masters have made themselves of late a seal for stamping gallons and bushels without warrant, whereas the men of the borough used to have the seal." In Devonshire "the jurors say that the prior of Frompton has toll in his manor of Norham, and that of late only, and takes toll of the men of the said borough wrongfully, to the great damage of the borough, by what warrant they know not." This great survey, or inquisition, was followed by the series of trials of *Quo Warranto*, in which the king tested "by what warrant" the markets were held which were in private hands, and enforced uniformity of practice as a condition of continued enjoyment of the franchise.

The management of markets in Scotland during this period took a different course. Large tracts of country were granted by the crown to various towns as areas within which the "burghs" should have the monopoly of buying and selling. Thus "the royal borough of Rutherglen had by charter rights of taking toll and exclusive dealing over the district where Glasgow afterwards rose."

After the time of the Edwards grants of new markets become much rarer. The decay of the manorial system, and the social changes indicated by the Statute of Labourers and the rising of the villeins give a sufficient explanation of this fact. The demand for grants of letters-patent for new markets steadily decreased during succeeding centuries, until the following result is arrived at, as recorded in the final report of the commission of 1887: "Between the years 1700 and 1846 we have in England and Wales, exclusive of the metropolis, only twenty-four markets created during 147 years; while during the forty-six years of this present century only eleven grants have been made. Two of these were grants of markets in the metropolis; three extended existing rights; and in three of the remaining instances no markets are now in existence." But while

royal grants were becoming obsolete, a system was springing up of creating new markets by private acts of parliament, by special local acts, and by general legislation.

In 1847 the "Markets and Fairs Clauses Act" for the first time codified the "provisions usually contained in acts of parliament authorising the construction or regulation of markets and fairs." But the provisions of this act only apply to markets created by act of parliament after the year 1847, and thus the scope of a very useful act was much limited.

The Public Health Act of 1875 for the first time gave urban sanitary authorities—i.e. boroughs, improvement act districts, and local government districts, conditional powers to establish markets. Under this act local authorities may establish markets if they do not interfere with markets already existing; may acquire existing markets by purchase or lease; may provide buildings for the convenient use of the market; may make bye-laws for their regulation; and take rents and tolls for their use. For carrying out these objects the sanction of the local government board must be obtained by the local authority.

There appear to be at the present day some 769 markets in England and Wales, exclusive of the metropolis. Of these 261 are in boroughs, 266 in other urban districts, and 242 in rural sanitary districts. Of the markets held in the boroughs, 216 out of 261 belong to the local authority, of the markets recorded in rural sanitary districts, 142 out of 242 belong to private persons, 18 to trading companies, 24 to bodies of persons other than trading companies, and 8 only to local authorities, while in 10 instances the market rights are questionable, and in no fewer than 40 instances the markets are not held. Thus, speaking broadly, large markets are now in the hands of local authorities and small markets in the hands of private persons. Under the existing law local authorities have no compulsory powers of purchasing markets within their districts which are in private hands. It is not easy to ascertain how far markets are remunerative at the present day. A selection of 40 markets made in the final report of the commission of 1887 shows that on a capital expenditure of over two and a half millions, a return is made of very nearly 6 per cent in tolls and other incomings. The nine markets belonging to the corporation of London on an expenditure of over 3 millions obtain a revenue of nearly 4 per cent.

The accommodation provided by private market owners is often merely an open space, or open street. There are still many cattle markets in England which are held in the streets. Many private owners lease their markets to persons who make a business of taking tolls on hire and making a living out of the difference between the rent they pay and

the tolls they collect. In the south of England even local authorities are found to lease their markets in this way. Markets are a decaying institution in the south of England, but flourish in the northern counties.

The majority of the commissioners of the 1887 commission recommended the abolition of market monopolies upon payment of compensation. A strong minority preferred the compulsory transfer of all markets to local authorities.

(See further MEDIEVAL FAIRS ON THE CONTINENT.)

[*First Report of Royal Commission on Market Rights and Tolls* by Mr. Charles Elton, Q. C., M. P., and Mr. B. F. C. Costelloe.—*Final Report of the Royal Commission*.—Cunningham, *Growth of English Industry and Commerce*.—Thorold Rogers, *A History of Agriculture and Prices in England*.—Sir F. Palgrave, *The Merchant and the Friar*.]

FAJARDO or FAXARDO, COUNT DIEGO DE SAAVEDRA FAXARDO (1584-1648), knight of the Order of St. James, Spanish historian and political philosopher, was descended from a noble family of Murcia, being the son of Peter de Saavedra and Fabiana Faxardo. He became doctor of laws in the university of Salamanca, and in 1606, as secretary of the viceroy of Naples, Cardinal Gaspar Borgia, commenced a distinguished career in foreign diplomacy, which involved a residence of thirty-four years in Italy, Switzerland, and Germany. He died at Madrid, a member of the council for the government of the Indies. His works were widely read, not only in their original tongue, but also in Latin, Italian, French, and English translations, but neither these, nor any Spanish edition subsequent to the first, have the reputation of being faithful reproductions of the original. The English translation of his most important work, *Idea de un Principe*, published by Sir J. A. Astley in 1700 under the title of *The Royal Politician*, is from the fourth edition (Valencia, 1660). In this book, "under the awkward arrangement of a hundred ingenious emblems, with mottoes that are generally well-chosen and pointed, he has given a hundred essays on the education of a prince; his relations with his ministers and subjects, his duties as the head of a state in its internal and external relations, and his duties to himself in old age and in preparation for death" (Ticknor's *History of Spanish Literature*, iii. 215, 216).

Idea de un Principe politico cristiano, representada en cien empresas, Münster, 1640, in 4to.

See also *Obras politicas y historicas*, of Faxardo. Antwerp, 1677-78 and Madrid, 1789-90. C. A. F.

Faxardo represented Philip IV. of Spain at the Congress of Münster, which laid the foundation of the treaty of peace of 1648.

His *Idea de un Principe politico Cristiano* (*Idea of a Wise and Christian Prince*), written in his leisure moments during his German embassies, and dedicated to the Prince Royal of

Spain, is full of sound and judicious counsel on all matters of state, but rather oddly divided under one hundred mottoes or *empresas*. The author's reflections on economic questions are mostly to be found under the *empresas* LXVI., LXVII., and LXIX. He advocates exemption from taxation for all goods of first necessity consumed by the labouring classes, and holds agriculture to be the principal wealth of a country and the richest mine it can possess. The cost of coinage is the only item that should be added to the intrinsic value of money. Fajardo, however, shares the opinion prevailing in his time that export duties are always borne by the foreign purchaser.

Frequently printed and reprinted, the *Idea de un Príncipe político cristiano* was translated into Italian (Venice, 1648), into French (Paris, 1668), and anonymously in Latin under the title of *Symbola christiana politica* (Brussels, 1649). It is included in Rivadeneyra's *Biblioteca de Autores Españoles* (Madrid, 1853, vol. xxv.) E. cn.

FALDAGE originally appears to have been the same as faldsok, viz. the right of a feudal lord to compel his tenants to fold their sheep at night in his fold on his demesne lands, so that his lands might have the benefit of the manure. The term, however, afterwards came to be applied to the money payment for which tenants generally commuted this service.

[Cowell, *Interpreter of Words and Terms*, London, 1701.—Ducange, *Glossarium Medicæ et Infimæ Latinitatis*, Paris, 1733.—Martin, *Record Interpreter*, London, 1892.] A. H.

FALD-SILVER. A customary manorial payment on sheep (see FALDAGE); Vinogradoff (*Villainage in England*, p. 291) considers it an original, not a commuted payment. E. G. P.

FALLACIES may be defined as "apparent evidence which is not real evidence" (Mill, *Logic*, bk. v. ch. i. § 1). Logicians from Aristotle downwards have made it their business to class and label fallacies. The species termed by the schoolmen a *dicto secundum quid ad dictum simpliciter* comprehends many of the bad arguments in political economy; if with Mill we include under this head all cases "where a principle true in the abstract, that is all modifying causes being supposed absent, is reasoned on as if it were true absolutely" (see DOCTRINAIRE). A signal instance is the omission of the condition of *time*. It is not true that prices, profits, wages, etc. "always find," but that they "are always finding" their level (Mill, *loc. cit.*) Mill places under this head several economical errors which might also be referred to the fallacy of *composition and division*, that is using a term collectively in one part of an argument and distributively in another. This sort of confusion affects many of the popular errors which economic science has dispelled. Thus, at the root of the mercantile theory lies the fallacy that an increase

of money is good for the community, because it is good for the individual. The inflation school of currency commit the same mistake. Many popular fallacies relating to wages fall under the same head. The notion of "making work" by breaking things is plausible only as long as attention is confined to the interest of the particular man who may thus obtain a job. Prof. Marshall well observes of an argument in favour of short hours of work: It rests on the fallacy "that all trades will gain by the general adoption of a mode of action which has been proved to enable one trade under certain conditions to gain at the expense of others" (*Princ. of Economics*, p. 744, 2nd ed.) A similar fallacy affects some of the arguments which are used in defence of trades unions (Cairnes, *Leading Principles*). Prof. Marshall's words are equally applicable to the prejudices which maintain protection. Nor are free-traders free from the fallacy of *composition and division*, when they ignore the distinction between the interest of any particular nation and of all nations collectively. List maintains that Adam Smith has only proved free-trade to be advantageous in the latter sense. Another fallacy often exemplified in economic arguments is *ignoratio elenchi*, not understanding the thesis which you controvert. Refuting the Malthusian theory by showing that in fact population has not outstripped subsistence is an instance of this fallacy (Mill, *loc. cit.*) It would be possible to include other economic fallacies under other scholastic headings. But it may be doubted whether a minute chart, so to speak, of the paths of error is of much practical use. What is required is rather a broad indication which, occurring in the course of one's reasoning, may prevent taking a wrong step. As a danger-signal of this sort may be offered the warning that in political economy a great many mistakes have arisen from treating, as fixed, quantities which are variable. Thus DE QUINCEY (*g.v.*) misses the true theory of value by assuming that the demand for a commodity is a fixed quantity independent of its price. A predetermined fund for purchasing commodities, is hardly less tenable than a similarly fixed *wage-fund*. The "iron law" that wages tend to sink to the point of bare subsistence is an instance of the same fallacy which has probably affected every theory of distribution down to recent times. It is well shown by Prof. Marshall that the different economic factors "mutually determine one another" (*Princ.*, ed. 1, bk. vii. ch. ii.). Some theories about the rent of ability become insignificant when it is reflected that the margin from which, as base line, the surplus remuneration of any calling is measured, is itself a variable depending on that remuneration (*id. sub voce* "Quasi-Rent"). In economics "all things," or at least most things, "are in flux."

[Effective refutations of economic fallacies are given by Bastiat (*q.v.*). Bentham's *Fallacies* may also be referred to. Of the writers on logic who have treated of fallacies Mill and Whately are particularly suggestive.] F. Y. E.

FALLATI, JOHANNES (1809-1855), German statistician and economist, was born at Hamburg, where his father, originally of Rovigo (Venetia), was a merchant. Educated at Tübingen and Heidelberg, he was appointed in 1838 professor of political history and statistics at the former university. In 1839 he travelled in England, inquiring into English statistical societies and other institutions. In 1848 he became a member of the Württemberg parliament, and under-secretary for commerce in the short-lived Frankfurt imperial assembly, 1848, 1849. On its dissolution he returned to an academic career, becoming in 1850 university librarian at Tübingen. From 1844 to 1855, the date of his death, he was joint-editor of the quarterly *Zeitschrift für die gesammte Staatswissenschaft*. During his brief political career Fallati planned and embodied legislative organisation in four directions, viz. the imperial consulate, inland navigation, marine measurement, and—his most cherished idea—an imperial statistical bureau. He also prosecuted inquiry in the question of emigration. To a winning personality and many-sided culture he united clear and practical method.

Works, economic and statistical:—*Die statistischen Vereine der Engländer*, Tübingen, 1840.—*Ueber die sogenannte materielle Tendenz der Gegenwart*, Tübingen, 1842.—*Einleitung in die Wissenschaft der Statistik*, Tübingen, 1843.

In the *Deutsche Vierteljahrsschrift*, "Ueber die Haupterscheinungsformen der Sucht, schnell und mühelos reich zu werden, im Gegensatz des Mittelalters und der neueren Zeit," 1840. 3tes Heft.

In the *Zeitschrift f. Staatsw.*: on Social Origins, i. (1844); on Association as a Moral Force, i. (1844); on English Working Men's Clubs and Institutes; on Free Trade in Land; and on German Blue Books, ii. (1845); on Agriculture and Technology at the Congresses of Italian Scientists, iii. iv. (1846-47); on Progress in Practical Statistics; and on modes of Statistical Inquiry in England, France, and Belgium, iii.; on Dearth and Famine Policy in Belgium; Belgian Excise; Belgian Census; Statistics in Sicily, Denmark, and Schleswig-Holstein; and Socialism and Communism, iv.; on Statistics at the Lübeck Germanist (Philoteuton) Conference, v. (1848); on the Evolution of Law in Savage and Barbarous Tribes; a proposed Inland Navigation Law; and Administrative Statistics in Germany, vii. (1850); on Trade Combinations in France, viii. (1851); on Statistics of Area and Population in British India; and Administrative Statistics in Norway, ix. (1852); on the Statistical Congress at Brussels, ix. (1853). C. A. F.

FALSA DEMONSTRATIO NON NOCET.

A wrong description in a will of an heir or legatee does not invalidate a disposition if there

is no doubt as to the identity of the person whom the testator had in his mind. (*Inst.* 2, 20, 30; *Dig.* 28, 5, 49, 3.) E. A. W.

FAMILISTÈRE, the name given by GODIN (*q.v.*) to the settlement which he founded at Guise, Aisne, France, in 1846. The word is reminiscent of the *Phalanstère* of FOURIER, by whom Godin was much influenced.

The Familistère is now a co-operative joint-stock company, possessing iron works as well at Guise as at Laeken in Belgium. A full description of it has already been given under the title *CITÉ OUVRIÈRE*, *supra*. An excellent and authoritative account, with maps, charts, and details respecting the nature, organisation, and march of the society, is *Le Familistère de Guise, Association du Capital et du Travail, et son fondateur, J. B. A. Godin. Étude faite au nom de la Société du Familistère de Guise, Dequenne et Cie., par F. Bernardot, Membre du Conseil de Gérance*, Guise, 1889.

[Godin, *Solutions Sociales*.—Urbain Guérin, *Monographie de l'Usine et du Familistère de Guise*, 1885.—*Les Ouvriers des deux Mondes*, 1892.—E. V. Neale, *Associated Homes*, 1880.—E. O. Greening, *Co-op. Traveller Abroad*, 1888.] H. H.

FAMILY BUDGET, the balance sheet of receipts and expenses of a family. Such a record is of prime importance in studying the consumption of wealth. It shows directly the standard of comfort and the real wages of the industrial classes, and is particularly useful in estimating the incidence of taxation, constructing weighted index numbers, and judging the various effects of movements of prices. It also brings to light subsidiary sources of income, where these exist, and generally lays bare to the eye of the statistician the whole economic life of the family concerned. The budget should, under ordinary circumstances, cover a whole year, to eliminate, so far as possible, the effect of disturbances due to the influence of climate and season, and to include clothing and other expenses which do not often recur. Budgets were compiled by writers like David DAVIES and Sir F. EDEN in the last century, but their modern history dates from 1855, when important works were published by DUCPETIAUX and Le Play. The last-named writer (see LE PLAY) devoted his life to the collection of budgets and founded in 1856 the *Société Internationale d'Economie Sociale* at Paris, which still carries the work on. Among recent writers on the subject may be mentioned Sargent, Dudley Baxter, L. Levi, Engel, Ballin, Schnapper-Arndt, Grüber, Cheysson, U. Guérin, Hector Denis, V. Brants, L. Bodio, the Countess Pasolini, Landolt, etc. Budgets are now frequently found in official publications (*e.g.* Consular Reports, Blue-Books, Reports of American Labour Bureaus). The subject has also received attention from the International Institute of Statistics, whose *Bulletins* should be consulted.

[See especially F. le Play, *Les Ouvriers Européens*, Paris, 1855.—*Les Ouvriers des deux Mondes* and *La Réforme Sociale*, published periodically at Paris.—*La Science Sociale*, Paris.—*Sixth and Seventh Reports of Commissioner of Labour*, Washington, 1891.—*Les Budgets Comparés des Cent Monographies de Famille* par Cheysson et Toqué, Rome, 1890.—*Labour Statistics. Returns of Expenditure by Working Men*, London, 1889.—*Family Budgets*, 1891-94, published by the Economic Club.—*Cost of Living of Working Classes*, Board of Trade, 1903, pp. 207-258. H. H.

FAMILY, JOINT (see JOINT FAMILY).

FAMINE.

Economic Study of, p. 19; Social Conditions Predisposing to, p. 19; Price of Corn as a Symptom of, p. 21; Natural Remedies, p. 22; Remedial Action by the State, p. 22.

Famines constitute for the economist a study in what may be called the pathology of wants, and their satisfaction; in them he sees the conditions of some of the greater deviations from that average capacity on the part of production and purveyance to meet consumption, in which economic equilibrium consists. Under certain conditions these deviations find to some extent an index in the fluctuations of price, and hence famine, or scarcity of food, the term being extended only by analogy to other kinds of scarcity (see COTTON FAMINE), has at times been used interchangeably with *dearth* (*dear-th*),—the latter word giving in terms of price that which *scarcity* expresses under the aspect of supply and *famine* under that of felt want or demand. It is more usual, however, to apply the several names to denote different degrees in this kind of economic disturbance. Thorold ROGERS, for example, limited *dearth* to mean a famine in which the rise in the price of wheat is only from 50 to 100 per cent, reserving *scarcity* for those famines in which the increase extends to over twice the average price (*Industrial and Commercial Hist. of England*, p. 59).

A disproportionate intensity of demand for the more important kinds of food in general, as compared with the supply, is here measured in one kind in particular,—the kind which has constituted the staple food of all classes of English people for a good many centuries. For the whole of Great Britain a more comprehensive measure by means of corn averages would be required; for Ireland and some parts of Europe it would be necessary to include potatoes in the computation; and for some Asiatic countries the price of rice would afford a truer index of the presence or absence of famine.

Social Conditions Predisposing to Famine.—As M. A. Legoyt has said: in France *famines* have gradually been replaced by *disettes*, and to day only *chertés* are known.

The causes of present immunity from famine in some countries must be sought, not in milder

seasons, nor altogether in that wars are fewer and less barbarous, but in the removal of many circumstances which enhanced the effects of bad seasons, of wars, and other positive checks to life. It is true that modern civilisation tends to develop certain predisposing conditions in the growth of cities and the extension of international division of labour; but through the progress of economic organisation, famine, if it be still a possible disaster, is rendered infinitely less probable. In past ages long immunity from famine rarely happened in Europe. The producer of corn was hampered by his own rudimentary methods of agriculture, by game-laws, and often by heavy taxation, by foreign military service or civil strife. The merchant was impeded by undeveloped communication and transport, by irregularity in international trade, and by a system of state-restriction in the interest of the consumer. The latter was much in ignorance as to the state of the general food-supply,—either was, or imagined himself to be, the victim of the merchant's engrossing and withholding his food, and was prone to panic. Money was scarce; the machinery of credit undeveloped; the money-lender oppressive. Under such circumstances, the introduction of one of the exciting causes of famine—sterile seasons, war, vermin, or pestilence—would be far more quickly and more intensely felt than at a stage of more advanced civilisation.

TOOKE expressed his amazement that parliamentary and other inquiries into the high and low prices between 1793 and 1815 did not assign as the principal cause the varying character of the seasons (*Hist. Prices*, I. iii. § 5). Adam SMITH was convinced that nothing but the waste of war and the fault of the seasons—especially the latter—had ever created a dearth, the violence of well-intentioned governments however converting dearth into famine (*Wealth of Nations*, IV. v.).

To the English economist the narrow margin of surplus corn in the home supply, prior to regular importation on a large scale, and in the absence of any regulated storage of grain, made an absolute deficiency of corn a matter of more than hypothetical interest.

England seldom had a surplus of three months' provision (DAVENANT reckoned it in his time at four to five months' stock) at the new harvest. While the national food supply stood foremost among political questions, economic opinion was divided on the crucial point as to the effective power of either a free or a regulated trade to induce, prevent, or remedy famine.

French economists of the last two centuries, concerned directly with a country of greater area and fertility, were more disposed to see in famines the result of merely partial deficiencies in crops in which collectively there was never a deficit. France commanded, even with an ordinary yield

an overflowing abundance of the means of subsistence,¹ and was both self-sufficing and the feeder of her neighbours. A good harvest meant a store sufficient for three years (cp. the allusions to Boisguilbert, Vauban, Richelieu, De Boislisle, Delamare, and Herbert, in Biollay, *Études économiques sur le 18me siècle*, 1885). The years of famine during the 17th and 18th centuries—there were forty-one in all—were imputed to commercial speculation, to “the malice of some merchants and regrators” (Delamare, pp. 1007; 954; 707), to the stupidity and brutality of the people (Boisguilbert, vi.), to changes in currency and disordered finances (Forbounais, *Recherches et considérations sur les finances*, ii.), to the intrigues of officials (Saint-Simon, *Mémoires*, ed. Chéruef, v. p. 332), then to those of ministers, finally to those of the king (Biollay, p. 11), and, by Turgot, to the restrictions on inland trade (*Lettres sur les grains*, pp. 27, 109). Necker was slightly more cautious: —*je suis bien qu'un vuide réel n'existe presque jamais*, etc. (*Sur la législation et le commerce des grains*, i. xiii.).² And Colbert, a century earlier, by frequently keeping himself informed as to local harvests, was constrained to admit that the great disorder in the finances was due quite as much to the general sterility, involving “an infinity of scarcity and need,” which had prevailed in France since the death of Henry IV. (1610-1662), as to official abuses and the exhaustion from long wars (Colbert, *Lettres*, etc., ed. Clément, ii. 5, 8, 10, 19, etc.). Yet in much more recent times Cherbuliez took as the starting-point of his arguments against the interference of the state in the corn-trade the hypothesis of an actually adequate supply (*d'un approvisionnement réellement suffisant*) (*Dict. de l'Econ. politique*, s.v. “Disette”).

It is contended that India is self-sufficing taken as a whole (Walford), and that her great famines, which are always partial, are, if not wholly preventible, certainly in great measure to be palliated and kept within the limits of a mere dearth. The chief predisposing conditions are local density of population, in conjunction with anti-migratory instincts, disafforestation (till the middle of this century), (see FORRESTS), rigidity in taxation of land, absence of diversity of industry, 92 per cent of the population being engaged in agriculture, insufficient irrigation and imperfectly developed means of transport. Storage of surplus grain in pits is largely practised both by cultivators and by merchants, so that the crops of one year are naver the only resource.

Famines, however, in India and elsewhere, bear this generic likeness to sorrow, that they come not single spies but in battalions. The seven lean kine which came up out of a seven times shrunken Nile have replicas in every history. The great famines in India have usually been the result of drought continued over two or three years. The record of French famines exhibits, besides shorter periods, series of bad harvests as follows:—

1043-49	1475-77	1692-94
1138-44	1528-34	1708-10
1338-47	1572-74	1788-95
1415-19	1625-31	1811-13
1430-39	1660-63	(<i>Legoyt</i>).

The law of the recurrence of famines has occupied economists intermittently from Petty downward, but first took shape as an inchoate scientific hypothesis in the researches made by Hyde Clarke and Jevons. (*Investigations in Currency*, vi.-viii.).

There does not seem to be *conclusive* evidence that a famine ever ensued in Europe in mediæval or modern times solely from what have here been called predisposing conditions. The only doubtful cases in English history seem to be (1) the famine of 1124, spoken of by Simeon of Durham as *magna per Angliam fames*, when the dead lay about unburied in city, village, and cross-road, and to which Penkethman assigns as the immediate cause, the dearth occasioned “by means of changing the coine” (*Artachthos*, 1765); (2) the “great penury” of 1248, “by reason of embasing the coin.” There was peace in the former year, civil war in the latter; no mention is made of failure of crops, but it is probable that they were at least deficient.

However necessary a physical or social disturbance of abnormal intensity be to bring about strain and distress amounting to a famine, it is equally certain that men have in many instances so shaped their physical and social environment, “either by blundering, by intention, or even by the zeal of them who govern” (Bandini), as to go far to bring themselves within hailing distance of hunger. Earlier generations are liable to render the land they live in worse adapted for the requirements of their successors by exhausting its resources (Sidgwick, *Principles of Political Economy*, i. iv.). William Rufus is said to have taxed the land so heavily that agriculture was discouraged and famines ensued. There were four in his short reign (Walford). The TAILLE (*g.v.*) crushed the French peasant, whilst the noble was exempted. Rome, both in ancient and modern times, ruined Italian agriculture to indulge itself in cheap bread (Mommson, *Hist. of Rome*, ii. 394-395; Galiani, *Dialogues sur le commerce des blés*). In 1295 and again in 1390 the export of wool was checked through our anxiety to secure coin at staple towns; the slender capital of the period was not “turned” and men famished (Penkethman; Knyghton). Fearful that corn might be exported in the famine of 1438-39, the government refused to take the more positive remedy of relaxing the restraints on inland water-carriage. Commerce, it is true, “recognising neither king nor country,” will go on exporting grain, while the people are famishing, as in England, 1586, 1595, and 1709 (see speeches of Queen Elizabeth and Queen Anne); and *Parliamentary Hist.*, vi. 802); Tudor kings, by issuing base money, have made famine “endemic” (Th. Rogers); and under a republic depreciated *assignats* may intimidate the farmer from bringing corn to a hungry town (Thiers, *Hist. de la Révolution*, iii. 93, etc.). Neglect of reservoirs have been a potent factor in enabling a scarcity of crops to dissolve Ceylon villages. Over-population may, as in the great Irish famine, be suffered to precipitate unchecked the action of the law of diminish-

¹ In the famine 1528-34, owing to heat and vermin, the harvest barely furnished enough grain for sowing (Delamare; cp. Legoyt).

² He would not admit that restrictions had ever occasioned *disette* or *cherté*, ii. cp. vi.

ing returns (Cairnes, *Fragments on Ireland*). The result of a relatively rigid law assessing wages, and a relatively elastic assize of bread, "necessarily brought want and starvation to the labourers" when corn grew suddenly dear (Denton, *England in the 15th century*, p. 96). Dependence on a staple commodity is in itself a risk. And ignorance generally, rendering man weak in wielding natural forces, strong in hatred of his neighbour and superstitious as to cause and remedy, is a predisposing condition implied in all the rest, constituting at times well-high an efficient and sufficient cause of famine (cp. Hazzi, p. 15; Leland, *Etruscan Roman Remains*, i. x.; King, *Italian Valleys*, p. 132).

On the other hand a country predisposed by physical conditions to scarcity, as e.g. Holland, may by effective organisation and enterprise have remained a stranger to national famishment (cp. Blanqui, *History of Political Economy*, p. 314).

Price of Corn as a Symptom of Famine.—That scarcity in the supply of corn (where corn is the staple food) is dearth in terms of price, is a truism. Observation, however, has shown that the price does not rise in the same ratio as the supply falls short. In an article used as a prime necessity of life the elasticity of demand is at a minimum, while the demand itself is habitually at a maximum. Thus when the supply is checked consumption is reduced reluctantly, creating the purveyor's opportunity and then the producer's. The intensity of demand has moreover ever been rendered the more stubborn at the rumour of a scarcity of bread, "by emotions against which reason is of no avail, and out of which populations are not to be educated" (Dupin, cp. Biollay, p. 22). "There arises a sort of general scramble for the scanty and waning stock" (Fullarton, *infra*, c. v.; Necker, *op. cit.* i. xiii.), which DAVENANT (*q.v.*) formulated by the famous law called after Gregory KING.

In considering this formula it must be borne in mind that fertile years beget confidence and check dearth; a bad year accelerates alarm in the next. The famine of 1390 was preceded by years of such plenty that it was believed a five years' stock might have been accumulated and the price rose not much (*non nimis excessivum*, Knyghton).

The maintenance of a heavy outlay for bread in times of scarcity involves a redistribution in the demand for other commodities. "Famine depreciates all but food" (F. Newman, *Lectures*, p. 85); but this must be accepted with reservations. "Fancy" foods will depreciate (Roscher, 61), although in a siege famine they may command a fancy price at the outset (Labouchere, *Diary of Besieged Resident in Paris*), but there will be an appreciation in the price of all the "surrogates" of the staple article of food, partly because they are scarce from the same cause, partly owing to increased demand. "Men," as Locke put it, "would not rob themselves of all other conveniences of life by paying all their money for wheat, when oats, that are cheaper, though with some inconveniences, would supply that defect" (*Several Papers on Money*, 1696, p. 48). If all kinds of corn have been deficient, grass, especially in a wet famine, and roots may be abundant, and dairy produce and mutton not much affected, although the cost of fattening cattle

will tell on beef before long. If the course of prices be traced in Thorold Rogers's tables during e.g. the chief famine of the fifteenth century, 1438, it will be seen that oxen rose in price in about the same proportion as corn, but not till the year after; wool, wine, and salt fish rose also, but pigs and sheep did not. Again, in the famine 1647-49, 1648 being the dearest year for corn; butter and candles rose in years 1 and 2, then fell; sugar and beef rose in all three years, sheep first fell, but shot up in year 3.

Disturbances and readjustments such as these are but the upper layer in the basket. The poor, when corn rises out of reach, betake themselves to inferior food, unless, indeed, by habitually living on something cheaper than corn, they have no such resource left them. Herein is another limitation to the sufficiency of the price of corn as a criterion of plenty or dearth. In the reign of Edward II. when the purchasing power of the people had been brought very low by the wars of Edward I., and a series of unproductive harvests supervened, wheat often entered in very moderate proportion into the loaf of the great bulk of the population, chestnuts, acorns, and fern-roots being substituted (Denton, p. 91). Waster, in *Piers Plowman* (W. Langland, c. 1332-1400) when gripped by Hunger, is glad to eat the horses' beans; bark has been much sought after both in European and Chinese famines, nor has exception been taken to dogs, cats, and vermin, dead bodies and living children, while the newly-imprisoned thief has found prompt sepulture in the stomachs of famished captives (cp. the accounts of English chroniclers in the writings by Farr and Walford referred to below).

Finally, excessive mortality, both through want and "famine fever," and other want-engendered illnesses (as well as at the hand of the enemy in case of war), constitutes a slackening in demand and a consequent modification in the movement of price, which is hardly a positive symptom of the cessation of famine. The excess over the average annual deaths in Ireland during 1846-47 amounted, taken together, to 216,716, of which 208,617 were the result of famine fever. Nevertheless 9395 died of starvation in the two years following, when prices had abated, wheat being cheaper than for sixty-seven years past, viz. 38s. 6d. (cp. Walker, *Wages Question*, p. 111).

The harrying of Northumbria by William the Conqueror in 1068, leaving a few survivors "to live like beasts of the field" and surrender themselves as slaves (Stubbs, *Hist.*, i. 78), the Black Death, 1349, when cattle roamed loose and corn rotted in its abundance, and "there were small prices for everything," yet the survivors feared to touch the plague-infected food (Knyghton), are instances of dislocation in the equation of supply and demand not easily interpreted by readings of price. DEPOPULATION itself, as a symptom of famine, is significant enough (*v. sub voce*). Mediæval towns have cast the beggar and the "casual" out of their gates in time of scarcity (Villani, Voigt, Wachsmuth, cited by Roscher). Famine, as checking population, has been held a necessary condition of internal peace in China, (Malthus, *Essay*), and has been tolerated as a chronic easing-off of demand in modern Europe.

Cantillon commented on the poor dying of "la misère, comme nous le voyons journellement en France." The peasant of southern Italy emigrates from sheer destitution (Nitti, *Rev. d'Ec. Polit.*, July 1892); and the history of industrial centres tells of chronic misery which has suffered, out of 21,000 infants, only 300 to survive their fifth year (cp. Schönberg's *Handbuch der polit. Oekonomie*, i. 689, n. on "Starvation Diseases"). Histories, such as Malthus desiderated, of the nations viewed as mostly poor people, will, with him, look on years of plenty as "interrupting causes, obscuring" the normal working of the great ultimate check to population.

Natural Remedies to Famine.—In the natural course of things "while the earth remaineth, seed time and harvest . . . shall not cease," the heat of war dies out, the recuperative recoil characterising the springs of human energy after mishap asserts itself markedly in obliterating the traces of famine (cp. Malthus, *Essay*, ii. xiii.) and by natural selection the predisposing conditions are re-adjusted. Dupont de Nemours's saying, *Ce qu'on l'appelle cherté est l'unique remède à la cherté*, is applicable both to the extended operations of the cultivator and the merchant, encouraged by the high price of corn, and also to restricted consumption. Demand for bread may suffer some contraction without entailing suffering. Penkethman even assigns wasteful "use of the creature" as a cause of famine (e.g. in London in 1869).

Nor is corn the staple food it once was. Tooke was careful to omit the labourers from that "agricultural interest" which derived benefit from scarcity. The wages of labour do not rise in full proportion to the advance in the price of provisions (i. 2). In a long famine they do rise especially, Thorold Rogers found, in the case of the worst paid kind of labour, as for instance, the wages of women and threshers of oats (*Econ. Interpretation of Hist.* i. 16, 17). The rise, after 1815 and 1821, was 10 per cent.

Theoretically the collector and redistributor of the annual supply of corn should, by steadying the fluctuating price of corn, be both a preventive and remedial force with regard to scarcity. But his aim being to produce profit rather than plenty, and often short-sighted at that, his power also, where publicity was small, being very great, he has been wholly mistrusted by the consumer as a "dearth-desiring Hoarder" (see FORESTALLERS AND REGRATORS, cp. Proverbs xi. 26).

Importation of German corn, as a remedy in time of famine, is mentioned in connection with the scarcity of 1258, and often subsequently. Knyghton accounts for the cheapness of corn at London, as compared with his native town of Leicester, through the number of grain-ships meeting in the Thames. Davenant, while estimating that the variety of soil and elevation in our corn-fields rendered us the less liable to more than local dearth, deemed us only "safe because we have everywhere the sea to friend." In modern times the advent of Russia to the international corn-market (in the French famine 1778; South Russia in 1816-17), and of America in the middle of this century, more recently of Australia and

India, minimised the chances of serious famine in Great Britain.

Remedial Action by the State.—This may briefly be analysed as follows:—

1. Subvention of the corn trade, viz.—(a) Regulated collection and distribution of corn in public granaries. Burke could point to the farmer's rick-yard and barn as the only British granary, but English economists have winced at Holland, with her well-stocked "conservatories," retailing to us our own grain (Davenant. Cp. *Britannia Longuens* and Sir W. Raleigh, p. 303, etc. "a dearth of only one year in any other part of Europe enriches Holland for seven years" (*Observations upon Trade*). (b) Purchase of foreign corn, the drain of bullion to effect which, was often a source of financial anxiety (Fullarton). (c) Restriction of export of corn. (d) Suspension of duties on Imports. (e) Bounties on imports of corn. (f) Suspension of bounties on exports, "a peculiarly English policy," pursued since the 15th century (Cunningham, *Growth of English Industry*, etc., Modern Times, p. 372).

2. Subvention of the producer by advance of loans, as in recent Indian and Russian famines. A developed banking system may herein replace the state (Fullarton, Roscher).

3. Economising the supply of corn by prohibiting the use of barley in brewing and distilling, or that of flour for hair powder; or the sale of bread before it is stale.

4. Compulsory lowering of the price of corn and bread.

5. Relief works and gratuitous distribution.

6. Publication of corn statistics.

[Besides the works mentioned, see:—Burke, *Thoughts and Details on Scarcity*, 1795.—Davenant, *Essay upon the probable Methods of making a People gainers in the Balance of Trade*, § iii. 1699.—Farr, *Journal of the Statistical Society*, June 1846.—Fullarton, *On the Regulation of Currencies*, 1844, cp. vi.—J. E. Thorold Rogers, *History of Agriculture and Prices*.—Walford, *Journal of the Statist. Soc.*, Sept. 1878; Mar. 1879.—Danvers, F. C., *A Century of Famines*, 1877.—Hunter, Sir W. W., *The Indian Empire*, 1878, etc.—Short, Th., M.D., *General Chronological History of the Air, Weather, Seasons, Meteors*, etc., 1749.—Fleury, *Famines, misères*, etc., 1849.—Legoyt, *Journal de la Soc. de Statistique*, vol. i. (1860).—Von Hazzl, *Betrachtungen über Theuerung und Noth*, 1818.—Von Koch-Sternfeld, *Versuch über Nahrung und Unterhalt*, 1805.—Roscher, *Ueber Kornhandel, und Theuerungs-politik*, 1852.—Bandini, *Discurso sopra la Maremma di Siena*, 1775.—Issaiew, *Revue d'économie politique*, July 1892.—Bernouilli, *Populationstatistik*, 1841, pp. 365 et seq. On physiological effects of hunger.—Luciani, *Fisiologia del digiuno*, and other authors cited by Lebrecht, "*Il Malthusismo*" (1893), p. 71, note.]

C. A. F.

FARMER-GENERAL. From early times it was the custom in France to farm out a tax to a contractor, who having advanced a fixed sum to the government, collected and pocketed the tax which he had bought. In 1697 the indirect taxes, customs, excise, *octroi*, taxes on

wine, salt, tobacco, oil, and manufactures, were collectively leased to a body of financiers, thenceforward distinguished by the name of farmers-general (*fermiers généraux*), to show that their powers of collection were general, and not confined to one particular tax. These farmers, sixty in number, were appointed by the king for periods of six years, and they paid an agreed sum in advance year by year. Their selection was largely governed by court favour, and the coveted contracts were often awarded to needy favourites who found wealthy financiers willing to surreptitiously share the transaction. The privileges of the farmers yielded to the government—

In 1697	37 millions of francs.
1743	64 " "
1763	90 " "
1786	112 " "
1789	180 " "

There can be no doubt that the farmers' profits were, as Adam Smith says, "exorbitant" (*W. of N.*, bk. v. ch. ii.), and the cost of collection "wasteful and expensive." The amount taken out of the pockets of the people was thus out of all proportion to the amount received by the state (see especially Necker's remarks upon this subject, *De l'Administration des Finances*). Moreover, the taxes, grievous in themselves, were collected harshly. Domiciliary visits, the seizure of goods suspected to be smuggled, and the efforts to capture smugglers who were, if caught, sent to the galleys or the gibbet, caused frequent personal collisions between the agents of the farmers and the public, often resulting in bloodshed. "Those who consider the blood of the people as nothing," says Adam Smith indignantly, "in comparison with the revenue of the prince, may, perhaps, approve of this method of levying taxes." The ostentatious luxury in which the farmers lived accentuated the popular anger against them, though their riches were sometimes antecedent to their contracts; and though some of them made a noble use of their wealth, e.g. Beaujon, who founded a hospital, Helvetius, Dupin, and Lavoisier. The Convention prosecuted the farmers-general as enemies of the people, and thirty-five of them, including Lavoisier, were guillotined. The Constituent Assembly abolished the system of farming-out the national revenues. The farmers-general have thus a history of less than a hundred years.

The disfavour in which they were held is best illustrated by a story told of Voltaire, who once gave a dinner at which the talk fell upon the exploits of famous robbers. When each guest had recounted some notorious exploit, Voltaire was pressed for a story in turn. "There was once upon a time," he began, "a farmer-general . . ."; then after mock hesitation, "I forget the rest!"

[Most French writers on finance refer to this

subject. Sully scolded the farmers as vigorously as Turgot, and Necker criticised them sharply. On disadvantages of the system, see Adam Smith, *loc. cit.*, COST OF COLLECTION OF TAXES, FARMING OF TAXES; INDIRECT TAXATION. On the other hand, it is contended that the necessary defects of the system are not considerable. J. B. Say thought the French post office might have been farmed out with advantage, and better managed by men of business who were not state officials, maximum rates being fixed by the government (*Cours Complet d'Econ. Pol.*, ii. 413). The money order department of the English post office has only ceased to be farmed out within about the last 18 or 19 years (1905). Comp. PUBLICANI.] H. H.

FARMERS' ORGANISATIONS IN THE UNITED STATES.

Order of Patrons of Husbandry, p. 23; National Farmers' Alliance and Industrial Union, p. 24; Farmers' Organisations in the North and West, p. 24; Coloured Farmers' National Alliance and Co-operative Union, p. 25; Other Organisations, p. 25; General Principles and Present Demands, p. 25; Ocala-Indianapolis Demands, p. 25; Business Features, p. 26; Political Action, p. 26.

The Order of the Patrons of Husbandry.—The first great farmers' organisation in the United States was a secret society founded December 1867, under the name "Order of the Patrons of Husbandry," but more familiarly known as "The Grange"; not an accurate designation, as the word "grange" is a term applied to one of the units of the order, as for example the local grange, the state grange, etc. (see GRANGERS). The aim of the Patrons of Husbandry was to bring the farmers into closer relation with one another, and thus to lessen the disadvantages of the isolation in the farmer's life, Social intercourse was emphasised and the educational features, including courses of reading and study, were made prominent; and it was sought to render life on a farm more attractive, especially to the sons and daughters of farmers. Economic purposes were from the earliest days leading features in the activity of the order, and for a time a large measure of success in distributive co-operation was achieved. The farmers sought to meet combination with combination.

A movement among the farmers to correct railway abuses had begun before the Patrons of Husbandry became a great power, and this order naturally enough joined in the struggle, and soon became the chief factor on the side opposed to railway corporations. Stringent laws were passed to regulate railways, railway commissions began to be created in various states, and this movement continued until now we have such commissions in most of the states of the union, and also a federal commission, called the Inter-State Commerce Commission. These laws were not always wisely conceived, the railway corporations rallied their forces, and finally a reaction began, which among other things weakened the Patrons of Husbandry. The order spread rapidly until 1874, when it

claimed a half-million members, and then began to decline in numbers and influence. One evil in the order was the presence of professional politicians and other designing persons slightly or not at all connected with agriculture, who attempted to use it for selfish ends. Membership was accordingly restricted in that year and limited to persons actually engaged in agriculture, and a few others, such as editors of agricultural periodicals and country mechanics who could reasonably be supposed to be in active sympathy with agricultural interests. The reaction following the meeting of 1874 continued for a long time, but recently the order began to grow again, stimulated no doubt by other powerful organisations, and it now claims to have organised 26,500 sub-granges, with an aggregate membership of 1,325,000. Deducting one-half of this number for extinct granges, gives a conservative estimate of 662,500 as the present membership. For a long time the political influence of the Patrons of Husbandry had been so slight as to attract little attention, although it has doubtless had some influence on legislation, even in recent years. The members of the order have for the most part acted with one or other of the two great parties, the Republican and the Democratic, and it is now the most conservative of the farmers' organisations of the United States. Its influence is chiefly social and educational, and it furnishes an excuse for annual gatherings of farmers' families, in which amusement is as prominent a feature as speech-making.

The National Farmers' Alliance and Industrial Union.—The Order of the Patrons of Husbandry is called the mother of the Farmers' Alliance, and it has undoubtedly, directly and indirectly, had great influence upon all the other farmers' organisations which have in recent years come into existence. The farmers turned from the grange to organise more radical orders, and these began to exist at about the same time in various parts of the south and west. Their purposes were similar, their platforms all having a striking resemblance to one another, owing to the similar conditions out of which they grew; and the various organisations coming into closer connection produced the present "farmers' movement."

The National Farmers' Alliance and Industrial Union is at present the greatest farmers' organisation in the United States, and is perhaps the most powerful organisation of farmers known to history. It and the Patrons of Husbandry are to be remembered as the two chief farmers' organisations which have thus far arisen in America. The National Farmers' Alliance and Industrial Union may be traced back to a local society in Lampasas County, Texas. The precise date of its birth is a matter of dispute, but it was somewhere between the years 1870 and 1875. The Local

Texas Farmers' Alliance was organised to protect the farmers against cattle thieves and "land-sharks," that is speculators in land, especially dishonest speculators and land thieves. The scope of the local society was enlarged, and in 1879 the Texas State Alliance was formed, one year later it received a charter from the state. This grew and united with other societies. There had arisen an order in Louisiana called the Farmers' Union with similar aims. This was the first larger order absorbed. The two consolidated in January 1887, at Waco, Texas, and took the name National Farmers' Alliance and Co-operative Union. As this society grew, it came in contact with the National Agricultural Wheel, which was founded in Arkansas in 1882, and was at first a local body. It grew rapidly and had membership in most of the southern states in 1887, and claimed a half-million members. Its avowed purposes were so similar to those of the National Farmers' Alliance and Co-operative Union that a plan of fusion was arranged at Meridian, Miss., in 1888, and having been ratified by three-fourths of the local organisations of both societies, the Union was declared in force 13th September 1889, and the new order became known as the Farmers' and Labourers' Union of America.

Farmers' Organisations in the North and West.—The organisations just mentioned operated chiefly in the southern states of the union, but similar bodies in the north and west had begun to make themselves known, of which the most important was the National Farmers' Alliance, sometimes called the Northern Alliance as the other society is occasionally, though now with less propriety, called the Southern Alliance. The National Farmers' Alliance grew from a local society established in 1880 to a national body organised in 1887 and claiming, in 1889, a membership of nearly 400,000. This was a non-secret order, whereas the National Farmers' Alliance and Co-operative Union was a secret order with grips and passwords, but the purposes of the two organisations were the same. Still another society with like aims was founded in 1883 in Southern Illinois. This was the Farmers' Mutual Benefit Association. It soon acquired a membership in Missouri, Kentucky, and Kansas, as well as Illinois, becoming a national organisation in 1887. A fruitless attempt to unite these orders was made in St. Louis in December 1889. Personal ambitions, sectional animosities, the race question, and the question of secrecy or non-secrecy seem all to have had more or less influence in preventing a fusion; nevertheless they came into closer relationship with one another, and have since then been acting together in the pursuit of their aims.

The Knights of Labour were represented by delegates at St. Louis, and thus were brought together urban mechanics, employes chiefly,

and farmers, not employes, but in so far as they did not cultivate their farms alone, employers rather than employes. Thus began a strange and probably hitherto unknown combination of industrial classes for political aims. A platform was agreed upon, acceptable to all, and this platform embodied what is known as the "St. Louis demands." In anticipation of fusion with the Northern Alliance the name of the Farmers' and Labourers' Union of America was changed at St. Louis to National Farmers' Alliance and Industrial Union. This is the body almost invariably meant when the Farmers' Alliance or The Alliance is mentioned in the press, and it has in fact extended its membership into states in which the National Farmers' Alliance was formerly strong, and appears nearly to have absorbed the latter.

The Coloured Farmers' National Alliance and Co-operative Union.—Only one other prominent farmers' organisation remains to be mentioned, and this is the Coloured Farmers' National Alliance and Co-operative Union. All who know the south in the United States will at once understand the difficulties in the way of common action of whites and blacks in a single society. A coloured alliance was established in Houston County, Texas, in 1886, and in 1888 it became a national body with the above-mentioned name. In 1891, it claimed a membership of considerably over a million, and representation in thirty states. It held a meeting in Ocala, Florida, in December 1890, at the same time when the National Farmers' Alliance and Industrial Union met; friendly greetings were interchanged, and it virtually agreed to act with the organisations of the white farmers for the attainment of the "St. Louis demands." The Farmers' Mutual Benefit Association also held a meeting at the same time and place, and appears to have come nearer to the other organisations present.

Other Organisations.—Other organisations are heard of here and there, as the National Farmers' League, the Farmers' National Congress, and the Supreme Association of the Patrons of Industry of North America—not the Patrons of Husbandry already mentioned—but all these are of minor importance. The Citizens' Alliance (Mrs. Annie L. Diggs, Washington, D.C., Secretary; Noah Allen, President) may be mentioned as an attempt to organise professional and business people in the cities, and thus to enable them to act with the farmers' organisations.

General Principles and Present Demands.—All the farmers' organisations have a statement of general principles similar to that of the Alliance, in which expression is given to feelings of fraternity and general goodwill to mankind, a determination to promote the education of the farmers is avowed, and sectional prejudice is condemned. The immediate demands of the

Alliance are stated in the platform adopted at St. Louis, which was endorsed by the Knights of Labour. As amended at Ocala in 1890, and at Indianapolis in 1891, the platform reads as follows:—

Ocala-Indianapolis Demands:

1. (a) We demand the abolition of national banks.

(b) We demand that the government shall establish sub-treasuries in the several states which shall issue money direct to the people at a low rate of tax, not to exceed 2 per cent per annum on non-perishable farm products, and also upon real estate, with proper limitations upon the quantity of land and amount of money.

(c) We demand that the amount of the circulating medium be speedily increased to not less than \$50 per capita (say £10).

2. We demand that Congress shall pass such laws as will effectually prevent the dealing in futures of all agricultural and mechanical productions; providing a stringent system of procedure in trials that will secure prompt conviction, and imposing such penalties as shall secure the most perfect compliance with the law.

3. We condemn the silver bill recently passed by Congress, and demand in lieu thereof the free and unlimited coinage of silver. [The Silver Bill condemned was that of 14th July 1890, providing for the purchase of 4,500,000 ounces of silver bullion per month.]

4. We demand the passage of laws prohibiting alien ownership of land, and that Congress take prompt action to devise some plan to obtain all lands now owned by aliens and foreign syndicates; and that all lands now held by railroads and other corporations in excess of such as is actually used and needed by them be reclaimed by the government, and held for actual settlers only.

5. Believing in the doctrine of equal rights to all, special privileges to none, we demand—

(a) That our national legislation shall be so framed in the future as not to build up one industry at the expense of another.

(b) We further demand a removal of the existing heavy tariff tax from the necessities of life, that the poor of our land must have.

(c) We further demand a just and equitable system of graduated tax on incomes.

(d) We believe that the money of the country should be kept as much as possible in the hands of the people, and hence we demand that all national and state revenues shall be limited to the necessary expenses of the government economically and honestly administered.

6. We demand the most rigid, honest, and just state and national governmental control and supervision of the means of public communication and transportation, and if this control and supervision does not remove the

abuse now existing, we demand the government ownership of such means of communication and transportation.

7. We demand that the Congress of the United States submit an amendment to the Constitution providing for the election of United States senators by direct vote of the people of each state.

Demand No. 6 was substituted for the St. Louis demand for complete ownership and operation of the means of communication and transportation. At a meeting of representatives of farmers' organisations and other organisations, most prominent among which were the Knights of Labour, the original St. Louis demand for complete ownership and operation was adopted as a platform for independent political action.

The following tabular statement gives some leading facts touching the different farmers' organisations mentioned:—

	Patrons of Husbandry	Southern Alliance ¹	Northern Alliance	Mutual Benefit Association	Coloured Alliance
Date of Organisation	1867	1870-1875	1880	1883	1886
Character of Ritual	Secret	Secret	Non-Secret	Secret	Secret
Estimated Membership ² 1892	662,500	3,000,000	200,000	150,000 (claimed membership in 1890)	1,250,000
<i>Demands.</i>					
Free Coinage of Silver	*	*	*	*	*
Abolition of National Banks	*	*	*	*	*
Establishment of Sub-Treasuries		*		*	*
Prohibition of Alien Ownership of land	*	*	*	*	*
Government Ownership of Railways		*	*	*	
Tariff Revision	*	*	*	*	*

An asterisk (*) indicates that the "demand" appears in the platform of the particular body designated.

Business Features.—The Alliance has made various efforts in business, all of which have been, to a greater or less extent, co-operative. Co-operation in buying and selling has been the chief of these, but mutual insurance has been a prominent feature. "Alliance Exchanges" have transacted business amounting to many millions of dollars; and although these appear to have failed frequently or sus-

pending, the claim is made that the gains to the farmers can be counted by the million. The abolition of the middleman is one of the goals of the Alliance.

Political Action.—The different farmers' organisations claim to be non-partisan, but the Alliance avows a willingness to use parties as "a method" of attaining their ends. At first there was an evident desire to work through the old parties, but the feeling that independent political action is a necessity has grown. A "third party," composed for the most part of members of the alliance, has made itself prominent in the country, and in 1890 astonished the politicians by capturing two states and gaining important positions in others; while in some southern states the alliance seemed to have gained control of the democratic party. In that year the alliance had nine members, chosen as "third party" candidates, in the House of Representatives, and claimed twenty-six members elected as democrats. There were also two members in the senate.

The Knights of Labour and the farmers' organisations are not in so many words committed to a third party, but the third party was formed by delegates from these organisations, and the same men are prominent in both. The members of the organisations appear to have liberty to vote as they please, but these organisations are the recruiting grounds of the "third party."

The meeting at St. Louis, February 22-24, 1892, already alluded to, adopted a platform called "The Second Declaration of American Independence" of the "Confederated Industrial Organisations of America." The preamble begins with these words: "This, the first great labour conference of the United States, and of the world, representing all divisions of urban and rural organised industry, assembled in national congress, invoking upon its action the blessing and protection of Almighty God, puts forth to and for the producers of the nation this declaration of union and independence."

The platform resembles closely that of the Alliance already given, except that a "land plank" is added which reads as follows:—"The land, including all the natural resources of wealth, is the heritage of all the people, and should not be monopolised for speculative purposes, and alien ownership of land should be prohibited."

"All land now held by railroads and other corporations in excess of their actual needs, and all lands now owned by aliens, should be reclaimed by the government and held for actual settlers only."

A demand for a Postal Savings Bank is added, and the incorporation of the telegraph and telephone as part of the postal system is specially mentioned as a desirable reform. The whole platform is described as a "three-fold

¹ This is the main body, familiarly known as the Alliance or Farmers' Alliance.

² These estimates are not vouched for by the writer of this article.

contention of industry," for it is divided into three parts, viz. money, land, and transportation, but the money part is most emphasised. A convention to nominate candidates for the political campaign of 1892 met at Omaha, Nebraska, in July. This movement was inaugurated and carried on chiefly by members of the Farmers' Alliance, though others were invited to co-operate. In order to attract various classes of voters the name "People's Party," used in the campaign of 1890, was adopted as a national party name. In the general election which took place in November 1892, General Weaver, the party's candidate for president, received a popular vote of about a million and a quarter, and obtained twenty-two votes in the electoral college. The party has eight members in the present (1893) House of Representatives and three in the Senate. The most prominent of the representatives is Mr. Jeremiah Simpson of Kansas, and the senator most frequently mentioned is Mr. W. A. Peffer of the same state—the state indeed in which the Alliance has secured its greatest victories. Immediately after the election an effort was made to repress the partisan tendencies of the Alliance, but without avail.

Peculiarities.—It must be remembered by English readers that the American farmer is a proprietor, but that means a peasant rather than a European landlord. The American farmer dreads becoming a tenant, and the fear that he may become one is a partial explanation of the farmers' movement. He has heard much of rack-rented Irish tenants, and he sees something of rack-renting in his own country. The farming and peasant class is regarded by conservatives as a bulwark against revolutionary tendencies, but the American farmer appears to have become revolutionary, and his organisations have joined hands with the Knights of Labour. Perhaps to the economist the most remarkable peculiarity is that already mentioned, viz. the combination of organisations of landowners with organisations of wage-earning mechanics.

Causes.—It would require a treatment of recent American economic history to explain the causes of the present American farmers' movement. The contraction of the currency at the close of the civil war, lowering the price of land, and raising the value of mortgages, is one cause; another is the extension of the means of communication and transportation, increasing the supply of available agricultural land, and lowering the prices of agricultural products. The American railway system, which has entrusted the ownership and operation of railways to private corporations, whatever may be its advantages, has been productive of grave abuses; and these have had something to do with the discontent of the farmers. Great fortunes and urban luxury, of which the farmer

hears much and of which he catches glimpses, may be also mentioned as a general cause.

The Future.—An estimate of the future farmers' organisations is so difficult that a wise man will be extremely careful in making one. The past would seem on the one hand to justify the belief that large political results ought not to be anticipated in the near future; on the other, that if the present organisations disappear, they will be succeeded by others. A clearer, fuller, more scientifically elaborated economic "platform" would also seem to be a condition of permanence as a political factor, but this may come as the result of continued discussion.

[Nothing like an accurate account of the farmers' organisations of the United States has appeared. They are mentioned in their connection with the labour movement in Ely's *Labour Movement in America* (New York, 1886). Mr. N. A. Dunning, who is connected with the Farmers' Alliance, has edited *The Farmers' Alliance History and Agricultural Digest* (Washington, D.C., 1891). This contains historical sketches of the principal farmers' organisations, and a number of essays upon topics connected with their demands or activity. Senator Peffer explains his monetary ideas in *The Farmers' Side* (New York, 1891). Annual reports of the various bodies are important but difficult to obtain. The periodical literature is vast. It is said that over 1000 newspapers now advocate the platform of the Alliance. The principal of these is the official organ of the Alliance, *The National Economist*, published in Washington, D.C. The *National Economist* has issued considerable pamphlet literature of importance as hand-books, tracts, etc. American magazines contain many articles about the Farmers' Alliance. Various numbers of the *Arena* for 1892 may be mentioned as containing articles favourable to the Alliance. The "Farmers' Alliance," by W. A. Peffer, in the *Cosmopolitan* for April 1891, gives a historical view. A more critical sketch is that which appears in the *Political Science Quarterly* for June 1891, by Frank M. Drew, entitled "The Present Farmers' Movement."]

R. T. E.

FARMING. This word has come to signify in general the cultivation of land, as a farm is a portion of land cultivated as one holding. But it is derived from a Saxon word signifying provisions, and was originally applied to the rent reserved for the use of land by a tenant, which in early times was in the form of a portion of the produce. When in money it was called "*alba firma*," meaning silver. So in Scotland "a victual rent" is still used to express a rent consisting of a certain quantity of grain, though that is now converted into its current equivalent in money as ascertained by the FIARS PRICES. For the purpose of the present article farming will be understood to be the system of letting land for cultivation to a tenant, who finds the whole of the capital, and pays the rent reserved to the landlord.

whether as a definite quantity of produce or as money. Where the landlord finds part of the capital, and receives a share of the produce, the arrangement follows the system of *MÉTAYAGE*.

The cultivation of land by interposition of a tenant belongs almost necessarily to a somewhat advanced stage of social organisation, and to conditions in which large domains are held by one individual. In the earliest times the land of a tribe was held in common, and after separate property began to be recognised, the several portions were only such as one family could cultivate. With the division of labour, however, there occasionally occurred cases in which it was convenient that the owner should follow some different pursuit, and then the land might be for a consideration handed over to the temporary occupation of another. Such an arrangement was called by the Romans *precarium* whenever it endured only at the pleasure of the owner. The term *locatio* was applied when the land was let for a definite period. But the large estates acquired by Roman magnates towards the close of the republic and under the empire were chiefly cultivated by slaves working under the stern discipline of a steward, himself generally also a slave.

During the middle ages the aggregation of land in large estates under the Feudal System (see *FEUDALISM*) gave rise to various methods of holding. Part of the extensive grants from the crown were by subinfeudation transferred to smaller owners,—for military service, or for certain dues payable on occasion of the lord's exigencies, and occasionally for some small annual rent in money or kind. But the chief lords, as well as the subordinate tenants, drew the main part of their subsistence and revenues from the domain or "demesne" lands which they retained in their own occupation. The cultivation of these lands was carried on partly by dependents who were wholly maintained by their lord, partly by means of services reserved from bondsmen, or peasants, who received a grant of so much land as sufficed to maintain them, subject to the obligation of giving the services necessary to cultivate the lord's domain lands. This system continued to prevail generally on the continent till it was put an end to in France by the revolution, in Germany by the land reforms of Stein and Hardenberg. In England the same system gave rise to the copyhold tenures, in which the services, which abroad were indefinite and arbitrary and therefore oppressive, came gradually to be restricted by the courts to fixed amounts and periods. But early in the Plantagenet period there began to grow up a system of farming out land to tenants for fixed rents in money or kind. The records of certain manors show that this arrangement had become general by the middle of the 14th century. The statute book bears similar testimony. The pestilence known as

the BLACK DEATH (*q.v.*) had about that period swept off half the labouring population, and the immense rise of wages which followed, and which the statutes of labourers (23 & 25 Edw. III. an. 1346-49) (see *LABOUR STATUTES*) were passed to repress, prove that there existed a large body of free labourers unconnected with any special lands, but ready to give their services to whatever masters offered the highest wages. Up to this time the food grains were the main objects of culture, but the growing of wool, for which England became specially famous, gradually took a leading place in husbandry. The consequence was that less labour was required in agriculture, and small farms were consolidated into large. The statute book shows that by the beginning of the reign of Henry VII. the depopulation caused by this system had advanced to a degree which endangered the safety of the realm. The statute 4 Hen. VII. c. 16 (1487) states that in the Isle of Wight the practice of landlords throwing small arable farms into large pastoral ones, in order to obtain the higher profits yielded by wool, had proceeded to such an extent that the population was seriously diminished, and the island left without adequate defence against an invader, and it was therefore ordained that no one tenant should hold a farm exceeding the value of ten marks a year, though tenants who might be thus evicted from possession were declared to be entitled to compensation for improvements they had made or buildings they had erected. Although this statute applied only to the Isle of Wight, as being the part of the realm most exposed to invasion, there is no doubt that the greater part of England was in the same economic position. The mischiefs arising from the consolidation of small arable farms into large sheepwalks were some of the most prominent popular grievances during the whole period of the Tudor dynasty.

In Scotland also, half a century earlier than the last cited statute, an act of parliament (1449, c. 18) was passed for assuring to tenant farmers (*puir pepil* that labouris the grund), holding under leases for definite terms, security against eviction by a purchaser of the land, which shows that this system of tenure must already have become general in that country.

This simultaneous rise of the practice in both North and South Britain excludes some explanations which otherwise might have appeared to account plausibly for its prevalence in place of the continental systems of cultivation by forced labour. The immunity of England from foreign invasion cannot be accepted as a reason, for Scotland was harried by incessant inroads of her English neighbours. Neither could the richness of English soil, and the wealth produced by exportation of corn and wool, explain the result, for Scotland was comparatively a

desert, and grew barely enough for her own consumption. But the one point of resemblance between the two countries was that in both most of the great owners of estates were of Norman descent, while the bulk of the labouring population was, in the lowland districts, Celtic-Saxon. To the proud and warlike Norman personal superintendence of agricultural operations was distasteful if not degrading, and he willingly assented to an arrangement by which the whole risk and trouble were devolved on a tenant, from whom he drew a fixed annual rent in produce or cash. On the side of the labourer, the sturdy Saxon independence preferred the payment of rent for an assured possession of what on that condition he could call his own to the rendering of personal services on his lord's domains. The idiosyncrasies of both races thus, under great divergencies of actual conditions, combined to establish the system of farming of land to tenants. In England land seems to have been from the first, as it still continues to be generally, let from year to year. In Scotland the caution of the race, or the extreme poverty of the soil, which refused its returns except to a long preliminary process of reclamation, made leases for long terms the rule. This we see was the case in the 15th century, and it continues in Scotland to this day. The customary length was nineteen years; it is not known why this particular number was adopted. Of late years the uncertainty of prices has tended to the adoption of shorter terms.

Under the system of farming land the landlord as a general rule places the land in a position for cultivation and supplies the necessary apparatus affixed to the soil. Thus he reclaims the land from waste, drains it, removes boulders, forms fences and roads, and in addition erects a dwelling-house for the tenant, as well as stables, barns, cattle-sheds, and all the other buildings requisite for stock and grain. The outlay demanded under these heads is of course variable, but in almost all cases it is very large, and probably in most cases equals or even exceeds, and often in a series of years greatly exceeds, the original fee-simple value of the land. In general also the landlord is at the expense of upholding all these improvements and structures. But these general rules are subject to occasional exceptions. Thus under the cottier system which formerly prevailed in Ireland, the tenant made the reclamations and erected the humble structures required for his habitation and stock. Not unfrequently, however, the landlord gave wood, stones, or slate to aid him. In Scotland a great deal of land has been reclaimed under what are known as "improving leases," these being for a duration varying between thirty and fifty years. During the first decade the tenant probably sits rent free—he will pay a small sum during

the second, and a gradually-increasing one afterwards, under the condition that he brings the land under cultivation and erects suitable buildings on it. In this system the absence or smallness of rent is the consideration for the improvements, so that in this form they are paid for by the landlord.

After this expenditure of capital on the part of the owner of the land, the application of capital in the charges of cultivation is under the farming system made wholly by the tenant. The purposes to which it is applied are the purchase of horses and implements, of seed and manures, of live stock, and the payment of wages till returns come in. The amount invested by a tenant for these purposes varies between £5 and £15 per acre. Probably £7 or £8 is now an average, but all good farmers agree that it should not be less than £10. Under metayage most of this capital, except that required for wages, would be supplied by the landlord. Hence it appears that the farming of land has the effect of drawing in additional capital; it thus contributes to improved cultivation, while at the same time it tends to the maintenance of large estates. On the other hand a cultivator who has capital generally prefers to rent land instead of buying it, because as a tenant he obtains the use of his landlord's capital, which has been expended in the purchase of the soil, in draining and fencing, and in erection of buildings, and for all this the rent which he pays amounts to only a very low rate of interest. In this way the tendency is to promote the holding of large farms. In point of fact it is not till a tenant-farmer has made his fortune and intends to retire that he ever thinks of buying land; up to that time he usually invests his increase of capital in renting more land.

As a means of thus attracting capital to the cultivation of the soil the tenant-farming system has no doubt contributed materially to the fact that cultivation is on the whole better in Great Britain than in any other country; as, also, possession of capital implies comfort and some degree of education, it has elevated the position of the cultivators. The relation between landlord and tenant has in general been friendly and often accompanied with much personal regard. Nor, though really commercial in character, has it usually been conducted on strict legal rules. Landlords being often wealthy men have been easy in regard to the period of payment of rents, and liberal in accepting less than the full amount due when bad years occurred. Tenants, though holding only from year to year, have often retained the same farm for several generations, and in reliance on this usage have often expended a great deal of money in improvements which strictly belonged to the province of the owner of the soil. In Scotland, where leases in

writing and for definite terms are almost universal, this reliance on usage has not been the rule, and it has been common to submit each farm at the end of the lease to public competition. But even then many tenants have, at the cost of a moderate rise in rent—balanced frequently by the landlord executing further improvements—remained for life in the same holding; while in the exaction of the stipulated rent the same liberality, or laxity, has been shown as in England. Yet this very liberality has had a tendency to raise rents, since a sanguine man will offer more if he has some hope that in the event of losses he will not be severely pressed.

This easy-going arrangement went well on the whole not only in the periods of prosperity in the beginning of the present century, and again during 1850-70, but even during the agricultural depression which existed 1815-25, and again in 1833-40. When, however, a series of bad seasons set in from 1869, followed by severe falls in prices of corn dating from 1875, and of meat from 1884, all combined with a material rise in wages, some new influences were felt in the relation of landlord and tenant. A good many estates had changed hands, and the purchasers being generally commercial men, were inclined to take a strictly legal view of the liabilities of their tenants. Further, the extension of the franchise not only gave votes to the smaller tenants, but strengthened the general radical feeling in favour of tenants against landlords, and the Irish land legislation suggested some parallel changes in the laws of Great Britain. Under such motives the two successive AGRICULTURAL HOLDINGS ACTS (*q.v.*) were passed. But the social and personal effects of the depression have been much more vital. On nearly all estates very considerable changes of the tenantry have taken place. In a good many, leases or other written agreements have been introduced; a more commercial spirit has arisen; better agricultural education begins to make its way; more capital is invested alike on the landlord's and tenant's parts; and as a necessary consequence stricter calculations are made as to the profits and security of such investments. There is indeed an infinite variety in the degree in which such a spirit affects landlords and tenants; there are still many estates in which it is not felt at all, but such is undoubtedly the direction in which, with more or less rapidity, the mutual relations are moving.

One tolerably definite change may be said to be almost universally in progress. As a general rule it has been found that the largest holdings have felt the depression most severely, and that rents have been most regularly paid, and with least claim for reduction, on the smaller. One reason for this is that the smaller can be more closely superintended, another is that the tenant's capital consists partly of his own labour and that of his family, on which he does

not expect full or at least regular payment of interest. Hence the process of consolidating small farms into large has been checked, and the reverse process of letting land in small farms or in allotments has made considerable way. The subdivision of large farms into small farms would undoubtedly proceed more rapidly were it not that it demands an outlay of landlords' capital in providing dwelling-houses and other buildings which the rents at present current would hardly repay. The same cause prevents any subdivision by tenants themselves. Where, as in Ireland, they erect their own buildings, and these are so inexpensive as to be within the means of an ordinary labourer, a tendency to subdivision among different members of the family at once develops itself, and is with difficulty kept within reasonable bounds by the landlord. No such tendency occurs where the outlay of capital required for such a purpose is considerable.

These considerations explain the rapid growth of "allotments," which, speaking generally, involve no outlay of capital in buildings, and the comparatively slow progress of "small holdings," which as a rule require erection of buildings and fences. The fact that cultivation on the small scale of allotments pays well, even at the present very low rate of prices, is shown by an important paper in the *Economic Journal* for March and June 1893 (see ALLOTMENT; SMALL HOLDINGS ACT).

The question whether farming is best conducted by leases for fixed periods, or by agreement from year to year, has been viewed differently in Scotland and in England. Strange as it seems, the latter has tended in practice to a more continuous possession by the same tenant and his descendants. On estates belonging to old families a tenant is seldom removed, and the rent is generally moderate. Thus cultivation proceeds on the assumption that there will be no disturbance, and this, if verified, is unquestionably the system on which the best farming can exist and the best returns be obtained. But where a fixed determination of the lease impends, and there is uncertainty of its renewal, the tenant takes as much out of the land as possible, and hence whoever succeeds him (or he himself, should he ultimately obtain a renewal) has to spend two or three years in bringing the farm again into condition. Some landlords have endeavoured to remedy this mischief by a clause in the lease declaring that it shall continue in force until three or more years' notice has been given. Leases for lives were at one time common, especially on estates belonging to corporations and in Ireland, but they combine the disadvantages of a certainty of expiry with an uncertainty of time, and hence are unfavourable to good culture. They are seldom now adopted.

Certain conditions or rules of rotation of crops

and other methods of culture used to be universally found in written leases or in estate regulations. They are necessary to prevent bad farming when either knowledge or inclination to adopt good farming is absent. But the advance of scientific knowledge and the general recognition that only good farming can pay has tended to make these rules to be less strictly insisted on, and even to disappear altogether.

RENT, whatever be its theoretical definition, is, in the practice of farming, the surplus of produce after paying the expenses of cultivation and interest on the tenant's capital. It is really fixed by the tenant, for although in England it may be nominally fixed by the landlord, yet it depends on the tenant's acceptance of the farm at such rate. In Scotland farms are almost universally let by tender, and therefore the rent is directly fixed by the tenant. The rate of interest which a tenant generally looks for on his own capital is 10 per cent, or it is often viewed as 5 per cent of interest and 5 per cent as remuneration for his personal exertions. The INCOME TAX Acts originally assumed that a tenant's profits in England were equal to half the rent and in Scotland to one-third of the rent, but the fall in rents (following on the fall in gross value of returns) has altered this proportion, and led to the adoption in England of the same proportion as in Scotland. In computing the profit to be retained by himself, a tenant does not in general include the rent of the dwelling-house and value of the farm produce (milk, potatoes, etc.) consumed in his own household, so that the actual interest he expects to make on his capital is nearer 12 than 10 per cent. This refers to the making of new bargains; with falling prices the actual profits have often been much less, or have disappeared. Rates and tithes, till the recent change in the Tithe Act, were in England generally paid by the tenant, in Scotland by the landlord—under recent legislation rates are divided between the two,—but in any case they form a deduction ultimately from the rent and not from tenants' profits.

The rent paid for farms is in the United Kingdom almost always in cash. In Scotland the practice long prevailed of paying in kind, *i.e.* the rent was fixed at so many "bolls" (four to six bushels) of the different grains grown in the district, commuted each year for money at the rates fixed as the FIARS PRICES. Some poultry were often added, known as "kain hens." This arrangement met equitably the case of fluctuations in prices, but not of fluctuations in crop; if the price rose in consequence of a bad crop the tenant whose crop was bad suffered, he had less to sell and more rent to pay; while with a large crop and low prices the landlord suffered by the fall of rent while the tenant, though his crop might be good, made no better profit. But when free trade

rendered prices largely independent of the home crop, there ceased to be any compensatory influence at all, a low price might coincide with a bad crop; hence the system of rents computed in grain has almost entirely died out. A further reason for its cessation is that grain is now only a part of the produce, the production of meat having become a material source of revenue and the price of meat varying only within narrower limits; but, these variations occurring from market to market, its value could not be taken as any safe indication of the profits of the year. It may happen that store cattle are cheap while beef is dear, which gives good returns to the feeders while the rearer of young cattle is impoverished; or the reverse may occur and the breeder may make profits while the feeder buys so dear that he loses. These complications appear to render impracticable the suggestion which has sometimes been made recently that rents should vary in accordance with varying prices of produce.

Legislation has not very materially interfered with farming in Great Britain. In the Tudor period laws were enacted with the purpose of preventing the consolidation of small holdings and the laying down of land to grass. We have no definite record how far they proved effectual, but the fact of reiterated enactments and complaints seems to indicate that they did not attain their object. The influence of modern land legislation in Ireland and the Highlands of Scotland is yet hardly clear. In the rest of Scotland and in England the only compulsory enactments have been those giving compensation to tenants for the unexhausted value of manures and feeding stuffs, and giving to tenants the right to kill ground game. Neither have yielded much satisfaction to the parties concerned. The compensation is frequently more than balanced by claims made by the landlord for dilapidations or bad farming, which are quite legitimate but probably would not have been urged had there not been claims for compensation put forward by the tenant. If the Acts were more onerous than they have been found to be the result would have been that landlords would have refused to let farms, and have cultivated them by means of bailiffs. So also with regard to game, any compulsory provision is evaded by the tenant being made to understand that exercise of his legal rights will be followed by notice to quit. It is probably only the recent depression in agriculture—leading on the one hand to a difficulty in finding tenants at all, and on the other making existing tenants dependent on the kindness of the landlords—which has prevented these compulsory statutes from greatly diminishing the prevalence of the system of farming.

It is not easy to forecast the direction which farming may take in the future. The influence which developed it in the past,—the desire to

maintain large estates in land,—with all the social and political position which they implied, has in a great measure passed away, and more and more every year land is coming to be viewed and dealt with as a commercial commodity. The dominating question will therefore be whether land yields the best return to capital when cultivated by an owner or a tenant. The rent usually given by a tenant is little more than interest on buildings, drainage, and fences, so that he virtually gets the land for nothing. The position of tenant, therefore, with rents on their present basis, is undeniably an advantageous one. But the outlay of still more capital, both by the landlord in providing more ample farm-buildings and cottages, and by the tenant in paying the higher wages now required to keep labourers on the land, is urgently required. The good effects of both are conspicuous in Scotland and the Border counties of England, where higher rents (comparatively) are paid, the land is maintained in higher cultivation, labourers are more easily obtained, and being better fed, do more work for their wages. The misfortune is that many landlords or tenants do not possess the capital which would permit this course to be adopted.

[Mommsen, *History of Rome*, bk. iii. cap. xii. —Thorold Rogers, *History of Agriculture and Prices*.—Prothero, *Pioneers and Progress of English Farming*.—Shaw-Lefevre, *Agrarian Tenures*.—Boyd Kinnear, *Principles of Property in Land*.—Pell on the "Making of the Land in England," *Journal Royal Agric. Soc.*, 2nd series, vol. xxiii. p. 355.—J. Caird, *The Landed Interest*, 4th ed. 1880.]

J. B. K.

FARM, OF THE COUNTIES. The revenue received by the crown in composition for its ancient claims on the land. The old payments in kind, *feorm-futrum* made to the king by the tenants of demesne lands, were commuted in Norman times for money rents (*Dialogus*, i. 8). These rents, together with the profits arising from the king's claims on the land, were termed collectively the *feorm*, or farm, of the county. The collection of this farm was usually entrusted to the sheriff or some other accountant, who was called the farmer, and was made absolutely responsible for the whole farm due to the crown. In some cases, however, the collector was called the *custos* or bailiff of the crown, and, as such, was only responsible for as much of the farm as he actually received. In the revenue rolls of the exchequer the farm includes the following items: (1) The *corpus comitatus* or *rents*, which remained the same from year to year and were charged with certain fixed payments; (2) The *remansens firmæ post terras datas*, or remainder of the farm, after the value of the lands granted away from the body of the county had been deducted; (3) The *crementum* or INCREMENTUM chiefly arising from new tracts of land being brought into

cultivation; (4) The *progreium*, including any profits arising from the king's territorial jurisdiction. There was formerly an important record preserved in the exchequer called the *Rotulus Exactorius*, which contained the details of all the farms of England as they appeared in the Pipe Rolls, and this list was posted up to date from Michaelmas to Michaelmas. This record, however, no longer exists. The *Red Book of the Exchequer* contains several lists of farms; and in the nearly related MS. Hargrave 313, a unique table is preserved of the farms of England as they appear in the Pipe Rolls from the year 1154 to the end of the reign of Henry III. In later times it was usual for the crown to grant fee-farms, or long leases of land at low rents, to corporations and others, who answered severally for the same as farmers. In this way also a large area of forest land was brought under cultivation before the reign of James I., but most of these *assart-rents* (see ESSART) were resumed by the crown in the reign of Charles I.

A. E. S.

FARMING OF TAXES. The collection of revenue has always proved a problem to governments, especially in early times before the growth of efficient administrative machinery, or in states of very large extent. An obvious method of solving the problem has been to entrust the difficult and invidious task to private individuals or companies, who pay a fixed sum to the government and take any surplus they can make from the taxpayers as their own profits. The two states in which this system of farming the taxes has been most extensively adopted are ancient Rome and France under the old régime.

As the dominions of Rome grew, the privilege of extorting contributions from the provincials was sold by the censors for a period of years to *PUBLICANI* (*q.v.*), most of whom belonged to the equestrian order. Their profits were enormous, especially when Asia fell under Roman rule, and the equestrian capitalists became a very influential body in the state from the days of C. Gracchus. As the *publicani* had to give security to the state, and this was often beyond the wealth of any individual, it was usual for them to form associations among themselves and to share the profits. Sometimes a company only contracted for a particular branch of the revenue, sometimes it collected the whole payments of a particular province. A provincial governor could never have an interest in the companies of *publicani*, and this rule had the effect of excluding the senatorial class. The actual collection of the taxes was entrusted to subordinate agents.

In France it was only the indirect taxes which were farmed (see *FARMER-GENERAL*). The practice originated in the constant pressure of pecuniary needs upon the French government, which compelled it to anticipate its revenue.

and thus threw it into the hands of financiers. By the 18th century nearly all the taxes were farmed by a single company, the *ferme générale*. This consisted of sixty capitalists, who were nominated by the king, and were under the management of the controller-general. They paid a fixed sum for the right of collecting the *gabelle*, the *traites*, the *entrées de Paris*, and for managing the tobacco monopoly. The lease was made for six years, and the controller received a *pot de vin* of 300,000 francs, which was, however, refused by Turgot and Necker. The position of *fermier-général* was eagerly sought after, and the kings had always a long list of candidates for vacancies. The chief defects of the system arose from the tyranny of local agents, who were often ill paid, and from the action of the king. In appointing the *fermiers* he often saddled them with obligations to pay considerable sums to courtiers and favourites. These charges, called *croupes* and *pensions*, compelled the government to lease the taxes at a lower rate than would otherwise have been obtainable.

In England, the system of farming the revenue was adopted in Anglo-Saxon and Norman times, when the sheriffs paid a composition (*ferm* or *firma*), for the various dues which they had to collect from their shires. It was a great object of the towns to free themselves from the sheriff's control and to pay their contributions direct to the crown. The acquisition of this privilege, or *firma burgi*, marks the beginning of municipal independence. In the 12th century the collection of the DANEGELD (*q.v.*) was farmed by the government to the sheriffs, but after Henry II.'s reign the practice of farming the taxes gradually disappeared. This was due partly to royal jealousy of the power of the sheriffs, and partly to the rise of the new system of taxing personal property.

R. L.

FARMING TAXES, PRINCIPLE OF. The system of letting out the collection of taxes to contractors at a fixed rent, as opposed to direct levy by state officials (*REGIME, q.v.*), marks a low stage of financial development. It is naturally employed where a skilled administrative staff has not been formed, and where private capitalists are ready to undertake the work. Farming has been in most cases limited to taxes on commodities—the Roman direct taxes were for a time an exception (Mommson, *Hist. Rome*, vol. iii. p. 115)—and may be given either by delegating the collection of the tax, or bestowing a monopoly of the taxed product. The most conspicuous examples of this form of collection in ancient times are found in the Roman state, where powerful companies, *societates vectigales*, were formed for the purpose. France from the 16th to the 18th century is the chief modern instance (see **FARMER GENERAL**). Under the *ancien régime* the salt monopoly (*GABELLE, q.v.*), the *aides* or drink duties, and the tobacco monopoly were farmed

out. At present the system is limited to cases in which taxation is raised through monopoly of the taxed article—as tobacco in Italy—or to indirect taxes for local purposes (*OCTROI, q.v.*).

The objections to farming taxes are weighty and easily perceived. Politically, it interposes a privileged body between the ruler and his subjects, and leads to the enactment of oppressive revenue laws, which are harshly applied (*Ubi publicanus est, ibi aut jus publicum vanum aut libertatem sociis nullam esse*, Livy, xlv. ch. 18). Economically, it reduces the income of the state by the profits—generally exorbitant—obtained by the farmers. The early financial theorists protested against its use. Montesquieu (*Espirit des Lois*, bk. xiii. chs. 19, 20), while admitting that it is “sometimes desirable to give new taxes in farm,” strongly approves of direct collection by the state as good for both sovereign and subjects. Justi is still stronger, “the farmer is the leech of the people,” *Natur und Wesen der Staaten*, p. 451, ed. 1771. Adam Smith declares that “the best and most frugal way of levying a tax can never be by farm”; the great capital required for farming the revenue practically excludes competition, which is replaced by combination, “even a bad sovereign feels more compassion for his people than can ever be expected from the farmers of his revenue”; the permanent interests of ruler and people are in harmony, while those of farmer and taxpayer are opposed (*Wealth of Nations*, bk. v. ch. ii. art. 4, ed. Nicholson; p. 383).

The intense hostility that the farmers of revenue excited both at Rome and in France supports these strictures (see **PUBLICANI**). Collection by public officials is the only proper course in a well-organised state. Farming is, however, admissible when the public economy is imperfect, and the chief source of revenue is from the domain. To entrust the collection of dues on commodities to persons whose self-interest will secure strict supervision, and whose profits will be but a part of the larger return obtained by their efforts, is under such conditions the most economical mode. Wide-spread official corruption may also justify the employment of farming, which, however, is plainly a transitional step to be superseded by means of deeper reforms.

[In addition to quotations in text, the leading German writers on *Finanzwissenschaft*, viz. Roscher, bk. ii. ch. vi. § 87, 2nd ed. 1886.—G. Cohn, § 385, 1889.—A. Wagner, vol. ii. pp. 746-752, 2nd ed. 1890], also Bastable, *Public Finance*, 1903, pp. 552-3, 742-3.]

C. F. B.

FARR, WILLIAM (1808-1887). Born at Kenley, Shropshire, died in London. He was educated for the medical profession, but exchanged it to enter, in 1838, the department of the registrar-general of births, deaths, and marriages. His knowledge of statistical science, and lucid and original style of study and composition were early recognised by his

superiors in office; and, although he did not advance beyond the post of Deputy-Registrar-General, his talents and force of character made him, throughout his long public service, the most prominent man, in general estimation, of that section of the official hierarchy to which was confided not only the registration, study, and analysis of the three leading events in the lifetime of the population, but also the very important duties of the census enumerations. Dr. Farr's literary activity was very considerable, and was directed, with much earnestness and consistency, to the scientific analysis of subjects having a real practical bearing on social economy, sanitation, and the prevention of cholera and other specific diseases. Dr. Farr's contributions to the mathematical and statistical improvement of the theory of vital statistics and their tabulation were also important. Some were treatises from the medical, others from the mathematical or economical point of view, and all were remarkable for clear insight, and for novelty of conception. To Dr. Farr also belongs the credit of instituting a proper nosology, or classification according to diseases, of those dying at each age, and also of doing much to aid the labours of actuaries by the calculation of life tables based on reasonably accurate returns of the mortality according to the most modern facts revealed by the census enumerations of the whole population of England and Wales. His first essay on this subject dates from 1843, when he published his *English Life Table No. 1*, to be followed in 1853 by the *English Life Table No. 2*, and in 1864 by a more elaborate work, the *English Life Table No. 3* (often called Farr's Tables), which contains many tabulated values of annuities, and auxiliary tables for the calculation of all sorts of ordinary life contingencies, with an excellent introduction. The results are still largely used by actuaries when an approximation is desired to the most modern available experience of the duration of life amongst the general public of all classes in this country. Dr. Farr also wrote many able papers upon provident funds for widows and children of the civil servants of the state as a whole, and for single departments, such as the post-office. He was also partial to the study of centralising schemes, such as the purchase of railways by the state, government insurance of capital sums and survivorship annuities, and mutual cattle insurance associations for agriculturists. A vast number of reports on subjects more or less cognate with those above indicated were contributed by him to the various periodical publications and blue-books of the registrar-general and census commissioners, and to the transactions of English and foreign societies with which he was connected. It may be said with truth that no English statistician was ever

before so cosmopolitan, or so appreciated abroad as Dr. Farr. His genuine goodness of disposition, as well as his scientific attainments, made him a *persona grata* at the many international statistical congresses held at London and on the Continent, which he punctually attended as one of the English delegates. The effectual manner in which he played a leading part in the organisation of the congress of which Prince Albert was the president in London is still an agreeable reminiscence with the one or two still surviving secretaries of sections. At the Royal Statistical Society Dr. Farr was equally esteemed. He took, for a long period of years, a great share in its management, contributed many valuable papers, and filled with credit the post of president from 1871 to 1873.

Some illustrations of the style and scope of Dr. Farr's views and conclusions respecting his work and his important studies in the domain of vital statistics, a subject with which his name and public services will long continue to be honourably associated, will be found in his book under that title, named below.

In 1885 the Sanitary Institute of Great Britain reprinted, under the editorship of Mr. Noel A. Humphreys, of the registrar-general's office, a selection from Dr. Farr's works above mentioned, in some instances in rather an abridged form. This was issued by subscription as a memorial volume under the title of *Vital Statistics*, London, 1885, 8vo, pp. xxiv+563. It contains also an appreciative and interesting sketch of Dr. Farr's life, by Mr. Humphreys.

Among Dr. Farr's principal works are:—
 "Report upon the Mortality of Lunatics" (*Stat. Soc. Journal*, 1841).—"The Influence of Scarcities and of the High Prices of Wheat on the Mortality of the People of England" (*Stat. Soc. Journal*, 1846).—"Statistics of Civil Service of England, with Observations on Funds for Children and Orphans" (*Stat. Soc. Journal*, 1849).—"Influence of Elevation on Fatality of Cholera" (*Id.* 1852).—"Formules adoptées en Angleterre pour l'inscription des naissances," etc. (*Congrès Internat. de Stat.*, 1853).—"Report on Internat. Stat. Congress, Paris, 1855."—"Report on Nomenclature and Stat. Classification of Diseases, 1856."—"Report on Internat. Stat. Congress of Vienna, 1857."—"On the Pay of Ministers of the Crown" (*Stat. Soc. Journal*, 1857).—"Rapport sur la statistique de la G. Bretagne, 1858."—"Tables relative to the state of the British Army in Russia, 1854-56, published 1859."—"Reports on the Vienna Int. Stat. Congress, 1861."—"Recent Improvements in Health of Brit. Army" (*Brit. Assoc.*, 1861).—"English Life Table No. 3, large 8vo, clv.+605 pp., London, 1864."—"Address as President of Section F" (*Brit. Assoc.*, Bath, 1864).—"On Infant Mortality" (*Stat. Soc. Journal*, 1865).—"Mortality of Children in Principal States of Europe" (*Id.*, 1866).—"Statistik von Gross Britannien" (*Congrès Intern. de Stat.*, 1865).—"Statistique de la Grande Bretagne" (*Id.* 1867-69).—"International Coinage" (*Brit. Assoc.*, 1869).—"On the Question of

Metric Weights and Measures" (*Intern. Stat. Congress*, 1870).—"Inaugural Addresses as President of the Stat. Soc. 1871 and 1872."—"On the Valuation of Railways, Telegraphs," etc. (*Stat. Soc. Journal*, 1876).—"Étude sur la mortalité en Angleterre" (*Annales de démographie*, 1877).—"Some Doctrines of Population" (*Brit. Assoc.*, 1877).—"Éloge de Samuel Brown" (*Congrès Intern. de Stat.*, 1878), [cf. art. on Farr by Prof. V. John in *Handwörterb. der Staatswissenschaften.*] F. H.

FARTHING. Originally the name given to the fourth part of a silver penny (fourth-*ing*). First struck as a separate coin in reign of Henry I. The coinage of silver farthings was continued until the reign of Queen Mary. Copper farthings were introduced in 1613 during the reign of James I., and were coined until 1860, when the present bronze coinage was adopted. The bronze farthing weighs 43.75 grains, and is legal tender to the amount of one shilling. F. E. A.

FASHION, ECONOMIC INFLUENCE OF. Fashion, when taken in its more general sense as the mode in which a civilised society is satisfying its various wants, or more specifically that of dress, conveys the idea of a more or less incessant tendency to *change*. The French recognise this quality of variableness with greater emphasis than the English, *mode* being defined by them as taste that is essentially mobile and transient. For us fashion is current usage; for them "usage is long fashion." Fashion cannot claim to include all such changes in habits and modes of life as are due to fresh discoveries and improvements in taste and comfort as such, or are consequent on change in physical or social environment. These may all involve corresponding changes in fashion, but when eliminated they will leave a residuum of variableness in wants not accounted for, but which, together with the complementary fact of a general conformity to that variableness, make up the phenomenon of fashion properly so called. For the economist it is one of the causes producing disturbing fluctuations in demand and supply, and therefore requiring "a more careful investigation than those causes whose action is more constant and more undeviating" (H. Fawcett, *A Manual of Political Economy*, 1876, p. 84). Under present economic conditions fashion, or any given fashion, comes to be both for consumer and purveyor an element on the one hand of complication, on the other of simplification. The field for the selective play of the consumer's choice is so great that purveyance is rendered very speculative. On the other hand, where his choice settles, demand is certain, at least for a brief period, to be both prompt and extensive, though of uncertain duration. "Changes of fashion are often due to the steady deterioration in the quality of articles which sets in the moment they become open to the fierce and unscrupulous competition of the market" (Foxwell, *Irregularity of Employment*, p. 69).

Fashion in Consumption.—In this connection the economic historian has to trace how "custom in wants, locally homogeneous and temporarily stable, has become fashion distributed in space and transient in time" (V. Schäffle, *Das gesellschaftliche System der menschlichen Wirtschaft*, Tübingen, 1873, pt. iii. sect. iii. The phenomenon of fashion, rooted as it is in elemental instincts and tendencies, is absent from no society or social epoch. "Every epoch has colours and contours which it prefers, forms which it affects, symbols which it venerates" (H. Havard, *L'art à travers les mœurs*, Paris, 1884), ebullitions of sentiment, whims, and fantasies to indulge in. Every nation, while it differs from others in geographical conditions, in political and social constitution, has also its own passing ideas to express. Every individual modifies this sentiment of the day according to his own individuality. The essential elements of fashion are present in all societies (cp. Darwin, *Descent of Man*, II., p. 383; Westermarck, *The History of Human Marriage*, London, 1891, pp. 165-186 and 274).

As an element in present-day consumption of wealth, fashion may be ranked, not so much as a class of wants under either necessities, comforts, or luxuries, but rather as a co-efficient of any of these, a want *in* wants, *i.e.* a factor affecting a want already categorised under one of these three heads. Thus it may enter even into necessities, there being no one commodity, unless pure air and pure water be considered as relative exceptions, which admits of being produced in one *mode* only. The essential elements in food may be taken in a variety of products, some of which, such as "Vienna bread," may be sold at a "satiety price" and yet be fairly viewed as a fashionable taste. In comforts, and still more in luxuries, fashion is a co-efficient of higher power. There is more scope for change because there is a wider field for choice. Fashion in such wants has been ranked as one of the four principles of luxury (Baudrillart, *Histoire du Luxe*, Paris, 1878, i. p. 7 *et seq.*), and as the outcome expressed in unreal needs of refined sensuality, opinion, or caprice (J. B. Say, *Traité d'Économie Politique*, Paris, 1841, bk. iii. ch. iv.). At the same time it has been claimed for fashion, and by the same national temperament, that love of change and mobility of taste, of which fashion is an apparently inevitable expression, constitute the mighty incentive or *primum mobile* of all progress, and if wisely cultivated, would banish *ennui* and social strife (Baudrillart, *op. cit.* i. p. 10; Fourier, *Le Nouveau Monde Industriel*, Paris, 1845, § 1, notices 1 and 2 on "La Passion Papillonne"). Berkeley expresses the same idea in the *Querist* (Query 20) when he asks "whether the creating of wants be not the likeliest way to produce industry in a people?" (Nos. 10-14, 18, 102, 140, 141, 144, 406, may also be consulted.)

As a want in wants, fashion may be considered as influencing—(a) the quality (or kinds) of wealth consumed; (b) the relative quantities of the different kinds of wealth consumed; (c) the rapidity of consumption.

(a) As expressing desire for change, as well as for distinction, fashion will prompt to departures in the direction of *contrast*. Changes in dress abound with illustrations of this tendency. Further, as an expression of the effort after social equalisation, fashion, in diffusing itself outwards and downwards, involves deterioration in quality through adulteration, reproduction in coarser material, and more coarsely finished production. When every woman wishes to wear silk, cotton admixture is lavishly used, even in a proportion of 9 to 1. Again, as expressing the drift of some epochal idea, fashion selects some class of materials, forms, and colours in preference to others; deserting, for instance, the perukes, powder, and the gay hues of a courtly, conventional, and aristocratic *régime* for the simpler modes of a phase of social upheaval and democratic ideals.

(b) Thus also fashion affects the relative quantities of goods in demand. Ribbon is always to some extent in request, but consumed in far greater quantities when fashionable wear. Further illustration is needless.

(c) In enumerating the causes governing the rate at which wealth is consumed, Storch distinguished, beside nature and use, opinion, which destroys the value of wealth independently of matter (*Cours d'économie politique*, St. Petersburg, 1815, IV. vii. cp. I.). This truth, expressed more picturesquely by Shakspeare, "the fashion wears out more apparel than the man," is dealt with by some economists, notably by J. B. Say, who asserts that fashion, by its privilege of condemning what is still fresh, and perhaps comfortable and pretty as well, as worthless, impoverishes the state both in what it consumes and in what it does not consume,—an epigram limited in application through the redistribution and prolonged consumption of whilom fashionable goods in the second-hand trade. Nevertheless the effect of fashion on very many is to throw a glamour over certain products irrespective of beauty, convenience or fitness, and which, as it fades, causes the same product to be the more hastily superseded in proportion as those qualities are absent.

These constitute to a greater or less extent limitations to the nature and rapidity of changes in fashion. Beauty and fitness combined may limit the mode of dress in one age and climate to draping and swathing the body, in another to close-fitting raiment. Hygienic principles, where accepted, proscribe some tastes potentially or actually in fashion. The love of comfort and convenience may, and in Germany does, tend to diminish the love of change in

fashion (*vide* Carl Junghans, *Der Fortschritt des Zollvereins*, Leipzig, 1848, pp. 27-58). Economy may either prolong or proscribe a mode. Custom and routine, whether or not coinciding with convenience, may greatly circumscribe change, as in uniforms and special "costumes." Finally philanthropy and patriotism, morality and religion, have all been brought to bear as regulative principles on excessive instability or wantonness in tastes. Fashion on the other hand has often rendered such principles yeoman's service by investing them, as *their* co-efficient, with a constraining power exceeding that conferred by reason.

Viewed from the standpoint of the budget, changes of fashion, increasing some values and lowering others, have been considered as cancelling each other in the national income (Roscher, *Principles of Political Economy*, New York, 1878, § ceviii.). Modern production, on the "mass-pattern," and "ready-made" system renders it cheapest to buy what is in fashion. Yet Locke struck the true key-note when he wrote, "Things of fashion will be had, . . . whatever rates they cost, and the rather because they are dear" (*Some Considerations of the Consequences of the Lowering of Interest*, etc. 1692, pp. 93, 94; and H. S. Foxwell, *Irregularity of Employment*, etc., 1886, pp. 36, 37; cp. also a contrast in this respect alleged between French and German ladies, Junghans, *op. cit.*, pp. 57, 58).

Fashion in Production and Distribution.—The anxious purveyor to fashionable whims is as ancient a figure in history as fashion itself (cp. e.g. Plautus, *Epidicus*, ii. 2; *Aulularia*, iii. 10). Were the record of industrial and commercial statistics of longer standing, there might be many such instances preserved as that in the *Limburger Chronik*, which describes in A.D. 1380 the failure year by year of tailors who competed unsuccessfully in ministering to the swift changes of fashion. As affecting modern trade and industry, fashion is now considered, not merely under the special question of over-production or "gluts," but in connection with the more generic subject of trade risks, fluctuations of industry, or variations in production. The great expansion of variability in demand has involved the extension of principles once governing the production of articles of luxury only, to all forms and modes of supply. More or less, every maker and every purveyor, even of necessities, has now to study both to supply what people want and to win them to want what he supplies. Like everything else in the struggle for life, success, *i.e.* survival, is a feat of adjustment in midst of fluctuating conditions. Failure is the result of miscalculation, of mal-adjustment.

Even owners and cultivators of land are not exempt from this species of risk. Viticulture, sericulture, the cultivation of the finer sorts of

garden produce, and the conducting of ostrich farms, are liable to be affected by changes in fashion. The value e.g. of the ostrich feathers imported into this country had declined between 1880 and 1889 in the proportion of 5:2; the weight in that of $2\frac{1}{2}$:2.

In the tactics of the manufacturer the symptoms (1) of indecision in vacillating demand raise the problem: What can I "bring out" to attract? (2) of a favourable turn: How long will it last? What can I do to get, or keep, ahead in the race? Can I devise developments? (3) of a recoil: Can I turn out what is now in demand with such plant, machinery, and hands as I have? In such an attitude he has to confront demand with its co-efficient fashion, and armed with "money, wits, and perseverance," compass the capture of the lucky *conjuncture*. "Wits" he partly embodies in superiority of machinery, of designing, i.e. in the faculty of taking a lead in designs that "sell," of dyeing and finishing, and finally in that fine commercial *fleur* which leads to "hits" rather than to "misses." By it he lays his hand upon the pulse of taste, and, divining the symptoms, is able in some degree to eliminate from his business that "aleatory" element which dominates else the amount of his reward (cp. Leroy Beaulieu, *La Répartition des Richesses*, pp. 299, 302). The importance of such augury was expressly admitted by a Lyonnese manufacturer (v. "Report by Mr. Dyce to the Board of Trade on Foreign Schools of Design," 1840, cp. *Edinburgh Review*, vol. xc. 1849, p. 481). "That something, which in the world of fashion is only an indefinite sentiment, in fact, a mere predisposition, we endeavour to render palpable, to give it a strongly-pronounced character and assign it a name. Therefore it is that with us fashion is so paramount: the objects of industry, the commencement of a season, exactly chime in with, and anticipate, the predispositions of society." Others who are content to follow rather than lead fashions, watch the inception of a taste, estimate the rate of its diffusion, and anticipate its final stage in mass-production. Exact estimates of the effect of fashion on the career of an industrial centre or firm are complicated for *entrepreneurs* as well as for laymen, by demand being a plurality of effects, and by the "intermixture of causes" in trade fluctuations. Of nineteen merchants and manufacturers who gave evidence before the Commission of Inquiry into the Depression of Trade and Industry, 1886—an inquiry which negatively absolved fashion as a cause of that specific depression—one (a German in Scotland) stated that adaptation to demand and avoiding large stocks were sufficient to meet changes. Another confirmed this, the adjustment being possible "in the great majority of cases" without change of machinery,

an exception being the recent preference of worsteds (combed yarns or "serges," etc.) to woollens (carded yarns or cloth). All, in one way or another, while not clearly distinguishing between the grounds of change in taste, admitted that such changes, especially in the silk and lace trades, were "one of the greatest difficulties" they had to contend with, and had occurred, perhaps, with greater frequency and rapidity in late years. Bradford, Paisley, and Coventry in Great Britain, St. Etienne and Lyons in France, may be cited from a long list of centres, the industrial careers of which have experienced fluctuations peculiarly aggravated, if not created, by changes of fashion. In the words of a Yorkshire mill-owner, "in the crinoline days Bradford dress goods from English wools were in great demand. When ladies preferred clinging fabrics (cashmeres, etc.) the advantage went to the 'soft goods' of France, which now are largely made in Bradford. When mohairs and alpacas were in fashion, Bradford, by its yarns, got the advantage. When braids are fashionable, Bradford benefits. When calico prints were much in fashion, Bradford suffered; on the other hand it obtained advantage from the demand for *mousselines de laine*." If these and other towns and firms are to-day surviving in the fight, it is in consequence of adjustment to new tastes and of substituting many-sidedness for over-concentration. As the demand for the pseudo-Indian or Paisley shawl died out, which till about 1850 gave occupation to one-third of the Paisley town population, several industries—thread, starch, engineering, shipbuilding—were developed instead. "Trade is on a broader basis and less liable to severe fluctuations." Coventry has ceased to concentrate itself on ribbons, and realised locally unprecedented fortunes in cycles, besides developing other trades. Lister's spin thread when plush and velvet is "sluggish," and with superlative machinery, skill, and invention, weather every storm, even the blast of McKinley tariffs.

Adjustment to, and creation of, new demand in the business of the modern "purveyor" is in conformity to the democratic nature of to-day's fashions. Dress, for instance, was at one time imposed from above. Now the sovereign people's tastes have to be besieged simultaneously and *en bloc* by the shop-window, the stage, the park and race-course, by advertisement, daily paper, and fashion journal—this last organ coming to birth with the French Revolution. Royalty can only suggest, not lead, the fashion. Just as the highest class of dressmakers will equip their customers completely, so the modern "Grands Magasins" cater for the million from head to foot. And always rigidity is avoided by the purchase of lighter stocks, smaller quantities.

The interests of the wage-earner are affected

by fashion in a precisely parallel manner. New demands, if within the range of his skill, mean more work. Rigidity, whether by over-specialisation, want of technical versatility, or any accidents of combination, is fraught with danger. When the ribbon trade was slack at St. Etienne the workmen were reported to be in the habit of getting taken on in the other industries of that centre (v. M. de Lanessan's Report; Depression of Trade Commissioners' Report, 1886). The Coventry ribbon weavers with domestic looms fared very badly, especially after the French treaty (1860). Fashion was more responsible for the poverty occasioned by the decay of the Irish cottage industry of embroidery muslin (*Journal Statist. Soc.*, xxiv. 515-517, cp. De Laveleye, *Le Luxe*, Verviers, 1887, p. 70). A sudden cessation of employment is not alone disastrous, a slowly-decaying industry bringing with it degradation in skill and reduced wages. "East-End" industries, such as artificial flower-making, trimmings, e.g. fringes, etc., and fur-sewing, especially where there is no alternative occupation, suffer more sudden fluctuations, the London season—a political quantity with a co-efficient of fashion—greatly aggravating the precariousness of maintenance (v. Miss Collet on "Women's Work" in Booth's *Life and Labour*. See also CUSTOM; DEMAND; HABIT).

[Beside the works referred to, there are brief allusions to the effects of fashion in Cantillon, *Essai sur la Nature du Commerce*, 1755, ch. xiv., xv.—Malthus, *Essay on Population*, bk. iii. c. 13.—McCulloch, *Principles of Political Economy*.—H. Sidgwick, *Principles of Political Economy*, bks. i. ch. iv. and ii. ch. 11.—Walker, *The Wages Question*, ch. xi.—A. Marshall, *Principles of Economics*, 2nd ed., vol. i. pp. 144-145, 161, 167-168, 448.—Herrmann, *Staatswirtschaftliche Untersuchungen*, München, 1870, pp. 98-100.—De Molinari's art. "Mode," in Guillaumin's *Dictionnaire de l'Economie Politique*, 1853, is, of course, more comprehensive; still more so is J. Lessing's *Der Modeteufel*, Berlin, 1884. For the philosophy of fashion see J. von Falke, *Zur Cultur und Kunst*, Wien, 1878, "Costüm und Mode"; and F. Kleinwächter, *Zur Philosophie der Mode*, Berlin, 1880.—H. Spencer, *Principles of Sociology*, II. pt. iv. ch. 11. For influence of fashion on demand for gold or silver as currency see Giffen, *The Case against Bi-metallicism*, p. 220.] C. A. F.

FASTNYNGSEED. A doubtful term connected with certain ploughing work due from the holder of a full carucate on a manor.

[Vinogradoff, *Villainage in England*, 1892, p. 282, with reference to the *Ely Inquisition*.]

E. G. P.

FATHERS, THE; THEIR ECONOMIC TEACHING AND INFLUENCE. The history of Christian teaching, as expressed by the Fathers, concerning material goods and the proper conduct of life in relation to them, falls into three periods—(1) that of the Primitive Church; (2)

that of the third century; (3) that of Post-Constantinian times.

(1) The church of the first two centuries was marked by a fraternal sympathy in face of the hostile world, and by a belief in the approaching end of the dispensation. Accordingly there was a liberality of charity among its members which amounted almost to a common enjoyment of possessions, so that Tertullian (160-240) boasted, "We Christians have all things in common except wives"; and earthly possessions were treated with indifference except so far as they contributed to actual sustenance. It was scarcely necessary to enforce the duty of almsgiving; but, when it was referred to, the rule was laid down that relief should be given to every suppliant. Clement of Alexandria (d. 220) warns his readers not to attempt to discriminate; "for by being fastidious and setting thyself to try who are fit for thy benevolence and who not, it is possible thou mayest neglect some who are the friends of God." But as this charity was practically restricted to the necessary relief of the brethren, whose desert was sufficiently guaranteed by their avowal of Christianity, it could hardly have had any baneful effects. Moreover the Christian teachers constantly exhorted their followers to labour industriously at their several callings, that they "might have enough for themselves and for the poor, and not be a burden to the church"; and this attitude towards labour certainly helped to remove the stigma which the institution of slavery had put upon it. Wealth was recognised as a gift of God to be rightly employed. Tertullian explained that the Christians were "no Brahmans or Indian gymnosophists, no wild men of the woods, and separatists from life"; and it was only among Gnostics and some of the Judeo-Christian communities that there was any rejection on principle of private property.

(2) The ascetic Montanist movement at the end of the 2nd and beginning of the 3rd century, though itself unsuccessful, seems to have affected Christian thought by suggesting a "double ethic,"—the idea of the diverse duties of perfect and of ordinary Christians. Renunciation of earthly property became with Origen (185-253), and S. Cyprian (200-258), a counsel of perfection in the same way as celibacy. Almsgiving, also, was spoken of by the writers of the period as itself sin-atoning; and the treatise of Cyprian *On Good Works and Alms* had great influence on the subsequent doctrine and practice of the church.

(3) The situation in the post-Constantinian period was fundamentally changed by the adoption of Christianity as the state religion. The church now included multitudes whose moral standard was low, and with deepening distress among the poorer part of the population the sphere of its duties became more extensive.

Accordingly increasing stress needed to be laid on the duty of almsgiving; and to overcome the reluctance of their hearers, the great preachers—such as among the Greeks, S. Basil (329-379) and S. Chrysostom (347-407); among the Latins, S. Ambrose (340-397) and S. Augustine (354-430)—were led to use extremely forcible language as to the wrongfulness of a selfish use of wealth. Thus S. Basil, in a frequently quoted passage, puts into the mouth of the hard-hearted question, "Whom do I injure, if I keep what is my own?" and replies, "Tell me then what is thine own? Whence didst thou obtain it, and bring it into the world? The rich are just like one who has taken his place in the theatre, and crowds all who come in later, as if the playhouse, which is for all, were for him only. For they first take possession for themselves alone of what is common to all, and then lay claim to it as property, because they obtained it first. If each would only take as much as he needs to satisfy his necessary requirements, where then would be the rich, and where the poor?" Expressions almost verbally identical, and apparently calling in question the rights of property, fell also from S. Ambrose. But such language is to be explained, partly as rhetorical exaggeration; partly as due to the idea that voluntary surrender of property was the duty of every Christian who would be perfect; and partly as due to another idea which now made its appearance—that the natural and original order was one of communism, and that private property first arose from sin. But this original order Christians were to aim at restoring only by self-abnegation; and the Fathers did not intend to imply, nor were they understood to imply, that the compulsory abolition of private property would be justifiable. The case is parallel with that of slavery. Slavery also was held by the Fathers to be a departure from natural equality produced by sin. But though the Fathers regarded manumission as a work well-pleasing to God, and endeavoured to mitigate the lot of the slave, they never attacked slavery as an institution. Similarly S. Chrysostom describes the happy society which would be constituted if all the Christians in Constantinople would only agree to live in common; but he meant by this rather a distant ideal than a practical proposal.

It is clear, however, that the duty of giving all one had to the poor was taught as a means of perfection; and that this teaching, while it led to much noble self-sacrifice, led also to an indiscriminate distribution of doles, which must have had a pauperising effect. A more excellent way of charity was taken by the establishment of hospitals for the sick, which made their first appearance in the 4th century.

The contempt for earthly goods, pushed frequently to the point of asceticism, had

already led some of the Fathers, such as Tertullian and S. Jerome, to condemn trade,—especially foreign trade; and even S. Augustine spoke of trade as itself evil since it turned men from seeking God. Teaching such as this encouraged the early anchorite and monastic movements. But the more sober judgment of the church, as expressed by Leo the Great (390-461), held that trade was good or bad according to the way in which it was carried on. The conditions on which trade was justifiable were as yet hardly analysed; but the idea that buyer and seller should abide by the "just price" of every commodity had even thus early made its appearance (see *JUSTUM PRETIUM*).

Of more immediate effect was the teaching of the Fathers who with one voice reprobated the taking of usury, *i.e.* of all payment for the use of money. It is abundantly clear that the Fathers themselves condemned the practice absolutely,—whether the payment was small or great, and whether it was taken from rich or poor. But it is almost equally clear that, although borrowing for the purpose of business investment was not at all unknown, loans were far more commonly contracted by the poor to help them through seasons of distress; and it was in their character as the administrators of charity that the problem was brought before the rulers of the church. Thus Pope Gregory the Great (544-604) felt himself obliged on more than one occasion to make advances without interest out of church funds to farmers who were constrained to pay their taxes before selling their crops, and were having recourse to usurers. The Council of Nicea (325) forbade the practice of usury to the clergy; and it was doubtless due to the influence of the church that the Code of Justinian (529) limited the rates of interest which could lawfully be taken by laymen.

Christian teaching had, however, a wide economic influence outside its bearing on the personal employment of wealth. This is seen in its condemnation of infanticide; its suppression of the gladiatorial shows; its consecration of Sundays and festivals as days of rest; and above all in its effect upon slavery. Mr. Lecky has thus summed it up, "Christianity supplied a new order of relations in which the distinction of classes was unknown. It imparted a moral dignity to the servile classes; and it gave an unexampled impetus to the movement of enfranchisement." In all these ways it contributed immeasurably to the gradual elevation by which slavery slowly passed into mediæval serfdom.

[The above is based chiefly on the excellent work of Gerhard Uhlhorn, *Christian Charity in the Ancient Church*, Eng. trans. 1883, especially bk. ii. chs. ii. vi.; bk. iii. ch. iii.—Lecky, *History of European Morals*, 1869, ch. iv. gives an impressive account of the practical consequences

of Christian teaching, especially in relation to slavery; and Milman's chapter on "Christian Jurisprudence," in vol. i. of his *History of Latin Christianity*, 1854, should also be consulted.—F. X. Funk, *Geschichte des kirchlichen Zinsverbotes*, 1876, furnishes the best statement of the views of the Fathers on usury. The very suggestive criticism of the economic ideas of the Fathers in K. Knies, *Politische Oekonomie vom geschichtlichen Standpunkte*, 1853 (2nd ed. 1883, pp. 113-120) is the source of most of the later expressions of opinion on the subject by professed economists.]

W. J. A.

FAUCHER, JULIUS (1820-1878) was descended from French Huguenot exiles. He studied philosophy at Berlin, and there resided during the greater part of his life. As a journalist, lecturer, publicist, politician, and delegate in different capacities, he impressed himself upon his age mainly as an opponent of protection and collectivism. In 1846 he founded the first free-trade association at Berlin with Prince Smith, E. Wiss, and others. When the paper he edited was suppressed, he joined the staff of the *Morning Star* in London, and became Cobden's secretary. In 1863 he founded, and for fourteen years edited, the Liberal economic journal entitled the *Vierteljahrsschrift für Volkswirtschaft und Kulturgeschichte*. He laboured also for the unification of fiscal and commercial legislation in Germany, and founded for the promotion of inland navigation the *Verein für Fluss- und Kanal-schiffahrt*.

He wrote (a) separate works, *Die Vereinigung von Sparkasse und Hypothekenbank, und der Anschluss eines Häuserbauvereins als sozialökonomische Aufgabe unserer Zeit, insbesondere der Bestrebungen für das Wohl der arbeitenden Klassen*, Berlin, 1845, 8vo.—*In der Bankfrage gegen Gustav Julius*, Berlin, 1846, 8vo.—*The Russian Agrarian Legislation of 1861* (being No. 7 of the "Systems of Land Tenure in Different Countries," published under the sanction of the Cobden Club), London, 1870, 8vo.—*Ein Winter in Italien*, etc., Magdeburg, 1876, 8vo.—*Vergleichende Cultur-bilder aus den vier europäischen Millionenstädten*, Hannover, 1877, 8vo.—*Streifzüge durch die Küsten und Inseln des Archipels, und des ionischen Meeres*, Berlin, 1878, 8vo.—(b) Articles in the *Vierteljahrsschrift*: 1863—"Die Baumwollennoth," "Staats- und Kommunal-budgets," "Geschichte, Statistik und Volkswirtschaft," "Zur Frage der besten Heeresverfassung," 1864—"Oesterreich und die Handelsfreiheit," 1865—"Die Bewegung für Wohnungsreform" (pt. ii. 1866). 1866—"Sachsen am Scheidewege," 1867—"Die zehnte Gruppe auf der Pariser Ausstellung" (workmen's dwellings), "Die Hypothekennot in Norddeutschland," 1868—"Währung und Preise," 1869—"Vom Wegezzoll und seinem möglichen Ersatz," "Ueber Hansbau-Unternehmung im Geiste der Zeit," "Gedanken über die Herkunft der Sprache" (continued in subsequent numbers). 1871—"Auf kosmopolitischer Fahrt," 1874—"Ueber die wirtschaftliche Zukunft des osmanischen Reiches," "Ein Rückblick auf die Geschichte

des lebenden Geschlechts aus örtlichen und persönlichen Perspektiven," 1875—"Kurze Wechselziele zur Vorbeugung der Handelskrisen," "Die handelspolitische Grenzzollfrage vor dem 16ten Kongresse der deutschen Volkswirthe in München," "Die handelspolitische Grenzzollfrage vor dem deutschen Reichstage," "Die warnende Dynamit explosion in Bremerhaven," 1876—"Der Plan einer Erwerbung sämtlicher Eisenbahnen in Deutschland durch das Reich." C. A. F.

FAUCHER, LÉON (1803-1854), born at Limoges, died at Paris. A man of action rather than a thinker, at once a politician and an economist, he led a varied life. His first occupation was that of a teacher in the humblest sphere, but his essentially energetic temperament soon drew him into more active pursuits. The revolution of 1830 had scarcely terminated before he joined the *Temps*, a paper belonging to Jacques Coste, and he remained working on it, side by side with Dussard, up to 1833. He then joined the *Constitutionnel*, and also worked on the *Bien public*, a short-lived journal, and finally, in 1834, on the *Courrier Français*, of which he became chief editor in 1839. It was at this time that he published his work *De la réforme des prisons*, 8vo, 1838, and soon afterwards *L'Union du midi*, which, to checkmate the German Zollverein, proposed a customs association between France, Belgium, Switzerland, and Spain, 1837-1842, in 8vo. Faucher was, after 1834, a constant contributor to the *Revue des deux mondes*; his sober and exact style, contrasting with his impulsive ideas, rendered him popular with the readers of that journal. He read, in 1843, his *Recherches sur l'or et sur l'argent* before the Academy of moral and political sciences, and entered it in 1849. Meanwhile he commenced publishing, in 1845, his *Études sur l'Angleterre*, 2 vols. 8vo, a very interesting work which, though now of course out of date, may still be read with pleasure. The city of Reims elected him, in 1846, to a seat in the chamber of deputies, where he urged, but in vain, the issue by the bank of France and the departmental banks of notes of 100 francs (£4), a step in the direction of progress which was not taken till 1848. Meanwhile Faucher turned with increasing force towards those occupations for which he had a special taste. He was one of the most active movers in the free-trade campaign in France of 1846-47—which was itself a preparation for the campaign against socialism. Two works of his, *Du système de Louis Blanc, ou le travail, l'association, et l'impôt*, 1 vol. 16mo, and *Du droit au travail*, 1 vol. 8vo, testify to his labours in this direction. He became a representative of the people successively at the constituent and legislative assemblies. After this time politics, and for a moment, during the period of transition, finance, absorbed him. He discussed questions con-

nected with the budget and the income-tax, which last he opposed. Unfortunately also he gradually gave up economics for politics. Thus, in November 1849 he opposed the abolition of the law for the restriction of combinations among workmen, and in June 1851 he abstained from voting on Sainté-Beuve's resolution in favour of commercial liberty. On the 20th December 1848 the president of the republic placed in his hands the portfolio of public works, an office which he exchanged, the 29th of the same month, for the ministry of the interior. His unwonted intervention in the elections compelled him to quit office after a stormy sitting of the assembly, in which he defended a bad cause with a courage worthy of better things. He was intrusted again, on the 16th April 1851, with the office of minister of the interior only to be deprived of it on the 26th October following. His bias towards absolute government had led the man who was seeking power to imagine that he would find in Léon Faucher a useful ally in the government which arose after the *coup d'état* of the 2nd December. But Léon Faucher, when appointed on the consultative commissions which the prince-president joined in the character of a protector, entered his protest against him with a rather noisy indignation, and then retired into private life, devoting himself to economic work in the *Revue des deux mondes*, the *Journal des économistes*, and other similar publications. If something was wanting in Léon Faucher's character, his honourable disinterestedness was at all events highly appreciated by all parties. A. C. F.

FAUQUIER, FRANCIS (1704?-1768), author of *An Essay on Ways and Means of raising money for the support of the present war without increasing the public debts*, 1756, was Lieutenant-Governor of Virginia from 1758 to 1768, and in that capacity is said to have written to Mr. Pitt about 1760 warning him against a project of taxing the colonies.

His *Essay* maintains that the poor cannot themselves pay any tax, since taxes levied from them necessarily raise the price of labour, and thus ultimately fall on the consumer, or "man of fortune who lives on his income." To the "consumer," therefore, the best tax would be that which is subject to the fewest deductions before reaching the exchequer, and this, Fauquier thought, would be a tax on houses roughly proportioned to their value. To the 2nd edition, 1756, he added a postscript in which he declared that his only object was to recommend the plan of raising sufficient revenue to meet expenses instead of contracting debt, and proposed a graduated capitation tax as a possible substitute for the house tax (see DECKER).

[*Dictionary of National Biography*, vol. xviii. p. 249.] E. C.

FAVOURED, MOST, NATION CLAUSE. See MOST FAVOURED NATION CLAUSE.

FAVRE, ANTOINE, also FABER and FAURE (1587-1624), chief president of the senate of Savoy, the father of the French grammarian Vaugelas, and friend of St. Francis of Sales, was one of the most distinguished writers of his time on Roman law and jurisprudence.

Besides other miscellaneous writings, such as a tragedy (*Les Gordiens*), and sacred poetry, he wrote a short treatise, *De variis nummulariorum debitorum solutionibus* (Lyons, 1598, and Nürnberg, 1622), which, according to Michaud's *Biographie Universelle*, was directed against the more liberal views of Dumoulin (MOLINÆUS, q.v.) on usury and interest. E. CA.

FAWCETT, HENRY (1833-1884), was born at Salisbury, and died at Cambridge. He was educated at King's College School and at Cambridge, where he migrated from Peterhouse to Trinity Hall. He graduated seventh wrangler in 1856, and was elected to a fellowship at Trinity Hall in the same year. In 1858 he was suddenly deprived of his eyesight by an accidental shot from his father's gun, but the infliction of this, perhaps the most serious and disheartening of all physical calamities, did not cause him to swerve from the intention to enter public life which had been formed in early boyhood. He deliberately set himself to smoke and to improve his taste for music, because these occupations would help him to pass his time independently of the attentions of other persons. He walked, rode, skated, and fished, and throughout his public career he eagerly promoted any promising scheme for the encouragement of habits of self-reliance and means of self-support on the part of the blind. After his accident he returned to Cambridge, where he resided for some time. In 1863 he published a *Manual of Political Economy*, which commanded a wide sale, and was reissued in successive editions, until at the time of his death it had reached a sixth. In the same year (that of 1863) he was elected professor of political economy, and he continued to hold this appointment throughout his life, republishing in the form of books more than one course of the lectures which he had delivered from the chair. In 1867 he married Miss Millicent Garrett, and in 1877 he was for some little while a candidate for the mastership of Trinity Hall, finally withdrawing, together with the Rev. Henry Latham, in favour of Sir Henry Maine. Meanwhile he had, after standing and then withdrawing as a candidate for the parliamentary representation of Southwark in 1860, and contesting Cambridge and Brighton unsuccessfully in 1863, been elected for the latter constituency at the general election of 1865, and had entered Parliament as an advanced liberal. In the House he adopted an independent attitude on more than one occasion. He supported Mill in the proposed extension of the suffrage to women; he advocated the in-

clusion of the agricultural labourers within the range of the Factory Acts; he pressed for the abolition of religious tests in the Universities in 1870; he separated from the Birmingham League on the question of national education, and he was largely instrumental in defeating Mr. Gladstone's Irish University Bill in 1874. But it was as "member for India," as he came to be called, that he won especially a reputation, and it was in this capacity that he occupied the most distinctive position. He devoted considerable attention to the study and improvement of Indian finance, which he regarded as the key to the successful and useful government of India. He maintained that India was manifestly a poor country, associated in partnership with a rich country like England, and that in the terms and regulations of this partnership there should be the most scrupulous avoidance of anything that savoured of meanness or injustice. The account-keeping should be at once strict and clear, and the budget, instead of being discussed at the fag-end of the session, should be introduced at an earlier period and carefully examined, and, if need be, severely criticised. But, while the finances of India required this vigilant watchfulness, the Indians themselves were unrepresented in Parliament, and the government officials were, not unnaturally, inclined to resent unpleasant inquiries. Fawcett, however, overcame official opposition, and secured the full investigation of these matters before parliamentary committees. He wrote some articles on the subject for the monthly magazines, in which he showed that the revenue of the Indian government was inelastic, while its expenditure was elastic and increasing. The revenue derived from the land tax was settled in perpetuity in some districts, and for long periods in others. The revenue derived from the cultivation of opium as a government monopoly, or from taxes on its exportation, was precarious. The salt tax was imposed on a prime necessity of Indian life, and the other sources of revenue were inconsiderable. But the expenditure was continually growing. The cost of the civil service and of the army was increasing, the burden of the interest of the debt, which had to be remitted to England, was rendered heavier by the fall in exchange, and the execution of expensive works of irrigation and railway construction, and there was no surplus to meet such recurring emergencies as a famine. The practical sagacity and sober common sense with which Fawcett addressed himself to the consideration of these questions of finance, which his training as an economist fitted him to handle, the generous hatred of injustice and oppression which led him to insist on the strictest equity in the relations of England to India, the appreciation of plain simple principles, which inclined him to interest the public in a few broad considerations of

importance, and the resolute independence with which he persevered in his inquiries, were perhaps the most conspicuous features of his character, and they revealed themselves also in his attitude on other questions of political interest and in his writings on economic matters. He opposed the extension of the Factory Acts to adult women for fear of undermining their independence, and he urged the preservation of commons in the interest of the neglected agricultural labourer. In the election of 1874 he was defeated at Brighton, but was almost immediately selected as a candidate for Hackney. He was successfully returned, and occupied this seat, in spite of differences, frankly confessed and courageously maintained, with sections of his constituents, until his death. In 1880, on the formation of Mr. Gladstone's ministry, he was offered, and accepted, the post of Postmaster-General, when he introduced some changes of practical convenience, and some reforms designed to elicit and render easier the thrift of the poor. His administration was allowed on all sides to be most successful, and to afford evidence of the possession of practical qualities of a high order. "He regarded the post-office," writes his biographer, "as an engine for diffusing knowledge, expanding trade, increasing prosperity, encouraging family correspondence, and facilitating thrift." In 1882 he was attacked by an illness which aroused a remarkable amount of public sympathy. From this illness he eventually recovered, but in 1884 he succumbed rapidly to the effects of a chill. After his death Mr. Gladstone, writing to his father, declared that there had been no public man of our day whose remarkable qualities had been more fully recognised by his fellow-countrymen, and more deeply embedded in their memories. These qualities were, as it has been already attempted to show, largely of a practical order, and he cannot be said to have contributed much to the development of economic theory, though his powers of exposition were considerable. His love of independence and abhorrence of pauperism were shown in two little books—one on the *Economic Position of the British Labourer*, and the other on *Pauperism*, and he strenuously opposed any scheme of social reform which promised, by invoking the power and resources of the state, to endanger individual initiative and discourage private experiments. This spirit was also shown in the new chapter on State Socialism, which he added to the sixth edition of his *Manual*. He was, in fact, a faithful disciple of that school of economic thought which inclined in the direction of emphasising individual liberty and limiting the interference of the state, although he was willing enough that the state should endeavour to elicit thrift and self-help through the medium of the post-office, or protect the

interests of those who could not defend themselves—such as children who needed education, or agricultural labourers who were deprived of commons. His *Manual* was in the main, and it was intended to be, an abridgment of Mill's larger work, but he added materials of his own on such practical subjects as Co-operation and the Poor Law. His *Free Trade and Protection* was also, together with apt and recent illustrations drawn from the practice and facts of commerce, an exposition of orthodox theory. A biography of him has been written by Sir Leslie Stephen under the title *Life of Henry Fawcett* (1885). From this biography the appended list of his books is taken—

A Manual of Political Economy, 1863 (sixth edition, 1883).—*The Economic Position of the British Labourer*, 1865.—*Pauperism: its Causes and Remedies*, 1871.—*Essays and Lectures on Social and Political Subjects*, by Professor and Mrs. Fawcett, 1872.—*Speeches on some Current Political Questions*, 1873.—*Free Trade and Protection*, 1878.—*Indian Finance*, 1880. See also L. L. Price's *Short History of Political Economy in England*. L. L. P.

FAXARDO. See FAJARDO.

FEALTY. It was the peculiar characteristic of the feudal system that the political position of individuals was determined by their relation to the land. The man who held land of another was for some purposes his subject, or at least his dependent. The tenant became his lord's man (Lat. *homo*); did homage to him, and took an oath of fealty (fidelity) to him. On this principle, only those who held directly from the crown should have taken an oath of fealty to the king, whilst their sub-tenants should have taken the oath of fealty only to them. In some countries this was the case. But in England William I. at the great council of Salisbury compelled all landed men to take an oath of fealty to him. The obligation of this oath would override that of fealty to an immediate lord, if the two happened to conflict. An oath of fealty is still technically due from a freehold tenant to his lord, if any lord can be found; but it is never exacted (see FREEHOLD, HISTORICAL; FREEHOLD, LEGAL). F. C. M.

FEDERAL CO-OPERATION. The federal principle is to be traced, in one form or other, in most of the organisations of any importance which make up the British co-operative movement. Its development has not been primarily due to any school of theory, but to considerations of economy and stability. Obviously, if the co-operative movement was to consist of anything more than a number of local societies, with no common policy, centre, or organisation, some federal arrangement would be necessary,—either that, or something in the nature of an amalgamation. The co-operators hold—and it would seem that experience justifies the opinion—that the combination of autonomy for purely

local purposes, and federation for general purposes, is the best working form of constitution. It gives at once a large measure of liberty, together with all the advantages and economies to be derived from mutual organisation. The federal theory of government adopted by the co-operators is based simply on expediency and experience. As the movement has grown, so it has become advisable to provide, not for the supersession of local effort by any form of central administration, but for the better co-ordinating and more effective interaction, for the common benefit of local effort and organisation. But though federalism has been of spontaneous growth, the massing of local effort and resources for common purposes has inevitably had a stimulating effect, in its turn, on the movement as a whole. The federal embodiments tend to become propagandist bodies; their advice and help is sought by the weaker members of the associated groups, and they increasingly focus the opinions of the main body on matters affecting their social and political interest.

The Co-operative Union, to which most of the societies are attached, provides a sort of consultative and advising executive for the movement, and organises an annual congress, attended by delegates from the united societies. It is largely due to the influence of the union that such extraordinary uniformity characterises the constitution and methods of the societies. No pains are spared in devising the very best rules, as a guide to local effort; and the Industrial and Provident Societies Act, 1876, of which the union is the parent, forms the legislative basis for these rules. An amended act, promoted by the Co-operative Union, was passed in 1893. The functions of the executive of the union, which is known as the central board, are declared to be to act as (a) a board of legal and general advice in all matters relating to the business and interest of societies as co-operative associations; (b) a statistical bureau, collecting and collating for the free use of societies every kind of information likely to be of service to them; (c) a propagandist agency for the dissemination of principles of co-operation throughout both Great Britain and Ireland, and afterwards to the world at large. No society is admitted to the union unless its management is of a representative character, nor unless it agrees to accept the general principles enunciated by the union in favour of the promotion and practice of truthfulness, justice, and economy in production and exchange. The name of Mr. Vansittart NEALE will always be associated with the Co-operative Union, of which he was secretary for many years, and to which he devoted infinite labour. The present secretary is Mr. J. C. Gray; the headquarters of the union are at Bank Buildings, Nicholas Croft, Manchester. There are some co-operative societies unaffiliated to the

union, but the majority recognise the advantages which it offers, and subscribe to its funds, take part in the election of its executive, and send their delegates to the annual congresses.

The two co-operative wholesale societies—one of which embraces England and Wales, the other Scotland—are in many ways the most remarkable and powerful workmen's organisations in the world. Both are due to federal developments. The two federations are, in the first place, wholesale agents for the supply of their constituents, the retail stores. The capital is accumulated in precisely the same way as in the stores, which are conducted on what is known as the Rochdale system. Thus a society, on applying for membership, has to take up so many shares—not less than three £5 shares for every twenty members, or fractional part of twenty—on which it pays, on admission, not less than one shilling on each share. These shares are transferable only—that is to say, they may not be withdrawn, but only disposed of to some other society within the federation. No dividends on purchases or interest on capital (which is fixed at 5 per cent) can be withdrawn until such time as the shares are fully paid up. The usual plan is to allow the dividends and interest to accumulate until this shareholding qualification is reached. But the object of the wholesale societies is not to make profit, but to effect economies for their constituents by direct and effective purchasing. Their operations are conducted on such a gigantic scale that they are enabled to command the best terms to be had in the market; and with their fleet of half-a-dozen steamers, their buyers in different parts of the world, and their system of cash trading, they are practically independent of the middleman. At the end of 1904 there were 1150 societies, comprising 1,594,145 members embraced by the English federation, with a share capital of £1,196,703, and loans and deposits amounting to £1,769,006, whilst the sales for the year stood at £19,809,196. The Scottish society's share and loan capital at the same date amounted to £2,130,225, and its trade for the year was £6,801,272. These two federations, though distinct in their constitution, work together in many ways in making their purchases; so that the combined influence of the British co-operators is brought to bear upon the markets of the world. The federal agencies have many advantages not possessed by the ordinary trader. They are practically free from bad debts, as the societies are only allowed the briefest credit; their dealings are not speculative, inasmuch as their constituents provide an assured market whose demands can be foreseen with practical certainty from year to year; and their expenses for travelling and advertisements are very small. The cost of management is also extremely low. The constitution of the societies is on the basis of membership, not of stock.

The societies composing "the wholesale" may nominate one representative for every 500 of its members, to represent them at the general or branch meetings, which are held quarterly. These meetings examine the balance sheet, and discuss the proposals submitted by the directors of the society, who in their turn are elected by the retail societies. In addition to acting as wholesale purchasers, both the English and Scottish wholesale societies have started manufacturing on a considerable scale, the branches of industry selected being those for which there is the most constant and regular demand—such, for instance, as boots, ready-made clothes, furniture, flour, soap, and so on.

The federal principle has also been adopted for many years in the co-operative flour-mills, many of which exist in the northern and midland counties. There is no need to enter into details as to these bodies, which are conducted on the same basis as that of the co-operative wholesale societies, a fixed rate of interest being paid on capital, whilst the savings effected after paying working expenses and depreciation are returned to the shareholders' societies in proportion to the amount of their purchases. These mills, however, form a highly important part in the economy of co-operation; and they have served more than once to break up flour rings; whilst their influence on the prices of bread affects others besides co-operators.

The Co-operative Insurance Society is another federal association which has been promoted, for fire and life insurance, amongst co-operators. The Co-operative Newspaper Society conducts a weekly paper, the *Co-operative News*, its shares being subscribed for the most part by co-operative societies, though there are a certain number of individual members. A good many co-operative productive societies are conducted partly on a federal, and partly on an individual basis, the capital being found, and the direction provided, by co-operative societies and individual co-operators as well.

Something must be said upon the controversy as to the merits or demerits of co-operative production conducted upon the federal principle. The main arguments of the anti-federalists are based upon the fact that under the federal system the consumer and not the producer receives the first consideration—manufacture is carried on, not for the benefit of the workman but for the use of those whom he serves, though now in the Scottish Wholesale Society the workers receive a share in the profits. This school would be appeased in part if the workmen were allowed to share in the profits and management with the consumers; and various schemes have been put forward with the view of detaching the productive departments from the co-operative wholesale societies, and placing them under the director-

ship of the workmen employed. It is claimed also that under the federal system there is an absence of that spontaneity and scope for free development which alone can call forth the spirit and energy which must be the inspiration of co-operative production. On the other hand, the federalists point to what has been attained by their system, and to the comparatively scanty results of co-operative production carried on independently of the consumer. A considerable section of this school contend that co-operation is not concerned with profit-making, though the dividend is a feature of all the societies, but with a system of production and distribution based upon use. They hold, however, that good wages, good hours, good surroundings, and general conditions of work are on the whole more advantageous to the workmen than a problematical share in more or less speculative profits. As to management, they take the line that it is impossible for the workmen to hold the balance true in matters of workshop administration; and it must be confessed that a study of the history of co-operative production bears out this fact (see *Co-operative Production*, by Benjamin Jones). Though an award based upon the achievements of the two schools is by no means conclusive as to their merits, yet the controversy is coming to turn more and more on results, and the increased attention paid to the interests of labour by the federated societies may perhaps in time satisfy those who claim—and rightly claim—that the interests of the workman-consumer can never be served by depreciating the value of labour. It is, however, evident that experiments will continue to be freely tried in conducting co-operation on a basis in which federalism plays no part, and in which the consumer does nothing more than trade with the workmen associated in production.

[See *Co-operative Wholesale Society's Annuals*, published at Balloon Street, Manchester; and *Reports of Annual Congress of the Co-operative Union*, Bank Buildings, Nicholas Croft, Manchester.]

V. N.

FEDERATION, COMMERCIAL, as applied to the British empire, aims at establishing closer and more favourable trade relations between the colonies and the mother land than those which now prevail. When Great Britain, commencing in 1846, adopted the principle of free trade, she finally abandoned the right which she had previously exercised of directly regulating the commercial relations of the colonies. Those colonies had up to that time enjoyed advantages over foreign countries in British markets for many of their products, and in return they had often submitted to trade restrictions imposed by the imperial parliament. They were now to receive no better and no worse commercial

treatment than foreign countries; they were on the other hand to be left quite free to frame such trade policies as seemed to themselves best, without reference to other interests than their own. The result has been the adoption of extremely divergent systems in different parts of the empire. While the United Kingdom has followed out the principle of free trade, imposing duties for revenue alone, several of the most important self-governing colonies have adopted tariffs intended not only to produce revenues, but to artificially develop local industries by shutting out the products of other countries and even those of Britain itself.

In thus having no fiscal system common to all its parts, the British empire occupies a position peculiar among all the nations of the world. The fact is accounted for in part by the extremely anomalous composition of the empire. "In it we find communities existing under widely different conditions, some with vast populations concentrated in a small space, while others have their inhabitants thinly scattered over immense areas. Some with wealth which lends itself readily to direct taxation, others which can only collect revenue easily at the ports; some chiefly engaged in manufacture, others in the production of food and raw material; some with capital and cheap labour in such abundance that they can cheerfully face any competitors, others under severe pressure from the competition of commercially hostile neighbours more rich and numerous than themselves" (*Imperial Federation*, Parkin, p. 279).

It seems not unreasonable to suppose that this very variety of condition might have been turned to account in forming a common system. But no serious effort was made to check the tendency to commercial separation on account of two false assumptions on the part of political thinkers of the last generation. The first of these was that all other nations would soon follow the example of Great Britain in the adoption of free trade: the second, that the growth of the great colonies must inevitably result in their separation from the empire. The persistent advance of protective systems abroad has turned attention to commercial federation as a means of maintaining industrial prosperity: the growing belief that the empire can and should be held together has led to its consideration as helpful to the maintenance of political union.

All known precedents lead us to associate the idea of commercial federation with that of political federation. In the existing federal systems with which we are familiar, such as those of the United States, Germany, Switzerland, Austria-Hungary, and Canada, freedom of internal trade has been the result, even where it has not been the fundamental condition, of political unity. In the system which has been proposed for the Australasian colonies one of the

chief objects aimed at is the same freedom of internal trade. Free commercial intercourse, indeed, seems one of the most distinctive marks of national unity. It appeals directly to the masses, and gives at once a sense of mutual interest and mutual benefit. A common flag and common appliances for defence may mean more in times of danger: under the normal conditions of peace, the unhindered movement of commerce has the greater significance as a mark of common national life. The tendency, therefore, to look to commercial unity as a bond of national unity is natural and reasonable. Different methods have been suggested by which a greater or less degree of commercial unity may be attained.

1. By general adoption throughout the whole extent of the empire of the system of free trade as it prevails in Great Britain. The existence of high tariffs in many of the colonies, and especially of those imposed on great numbers of articles in order to give protection of local industries, certainly tends to weaken the sense of community of interest which is the strongest of national bonds. Earl Grey has pointed out (*Commercial Policy of the British Colonies, 1892*), that a feeling of annoyance has not unnaturally been caused among the merchants and manufacturers of the United Kingdom by finding the products of British industry prevented from competing on equal terms with similar goods produced in the colonies, while at the same time narrow feelings of commercial jealousy have been fostered in the colonies. He continues: "It is not only between this country and the colonies but between the different colonies with each other that feelings of animosity have been excited by the measures adopted in pursuance of the policy of protection. A few years ago bitter, and just, complaints were made in Tasmania of the conduct of their neighbours in Victoria in imposing duties on the fruits of Tasmania to protect their own growers from their competition. There have been disputes of the same nature between Victoria and New South Wales, and between New South Wales and Queensland, and quite lately threats at least of a tariff war between Canada and Newfoundland. In this manner it is to be feared that feelings far from favourable to the maintenance of a firm union of all parts of the empire must have been created both in this country and in the colonies."

The federation of the Australian colonies, the amalgamation of Newfoundland with the Dominion, will put an end to the conflict of interests between these colonies; it is not so easy to find a solution as complete where the interests of the United Kingdom and the colonies in the same way are opposed to each other. Purely protective tariffs could be removed; to do the same with ordinary tariffs, often necessarily high, would not be easy. Even the

United Kingdom would suffer considerable loss of revenue if the duties were remitted on the tea, coffee, and one or two other articles subject to duty imported from India, Ceylon, and other parts of the empire. But the chief difficulty would occur in the colonies, which, great and small, depend chiefly upon import duties for their public revenues. In most cases the bulk of these imports come from the United Kingdom or from other colonies. Inter-imperial freedom of trade would therefore leave a very large amount of necessary revenue to be raised by direct taxation. To such taxation the objection felt in most of the colonies is so decisive as to render impracticable its substitution for import duties. Complete freedom of trade within the empire, therefore, such as exists between the different parts of the United Kingdom, of Canada, of the United States, or of Germany, is at present admitted to be impossible. Still the abolition of protective duties throughout the colonies, and the limitation to a few articles of import duties imposed for revenue alone, would be a great advance towards commercial union. The desire, felt as strongly in many of the colonies as in foreign countries, to build up manufacturing industries, and the belief that this can best be done by protective tariffs, are the chief obstacles to the adoption of this policy. There are indications, not as yet entirely decisive, that in the colonies, as in the United States, faith in the protective system of developing industries is giving way. Should this change of public opinion go on, the prospects of commercial union by means of greater freedom of trade will be improved.

2. A system of preferential tariffs has been proposed in order to secure some measure of commercial federation while recognising existing differences of policy. Under this system, while each self-governing division of the empire would be left as free as before to choose between a tariff for protection or one merely for revenue purposes, it would be bound to make a fixed discrimination in favour of countries within the empire as against countries without it. The advocates of preferential tariffs for the empire claim that by them several important results would be secured. The preference given to colonial products in the home market would, it is believed, tend to direct emigration towards countries under the British flag, thus retaining as citizens great numbers of emigrants who now go away to add to the strength of foreign nations. This increased colonial population, with its greater productive power, would gradually make the empire almost entirely independent of other countries for supplies of food and raw material of manufacture: it would also furnish a large, friendly, and constantly increasing market for the output of British manufactures. The immense extent of the national territory and the variety of its produc-

tions are facts which are relied upon to give weight to these arguments for preferential tariffs. The undeveloped or half developed areas under the British flag in every zone produce almost every kind of food, every raw material of manufacture, every article of use and luxury. The sufficient application of labour and capital, it is argued, is all that is necessary to bring production up to the level of national consumption. The overflowing population of the United Kingdom and its superabundant capital would thus find the necessary outlet within the empire, and the colonies in these respects would receive what they most need. It is even asserted that if the resources of the empire were fully developed there would be no need to draw upon other parts of the world for any article of commerce, and that within a measurable time the supply of her colonies and dependencies would furnish full occupation for the factories of the United Kingdom.

Another argument has had much weight. The belief of the early advocates of free trade that all nations would be led to adopt that system having proved fallacious, it is now claimed that preferential tariffs within the empire will prove the best means of obtaining better trade relations with foreign protective countries. At present, for instance, the United Kingdom continues to give free admittance to American products, although the United States show an increasing tendency to impose duties for the express purpose of keeping out British and other goods, and so securing the home market for the home manufacturer. Cut off by a preferential tariff from free access to what is his best market, the American, it is said, would be glad to make concessions in order to regain his old privileges. In this case a preferential tariff would be a temporary expedient for coercing protective nations into a greater or an absolute freedom of trade.

Some of the difficulties in the way of adopting a preferential tariff are obvious. The United Kingdom still depends upon foreign countries for more than 75 per cent of its imports: these would be taxed to favour countries which furnish less than 25 per cent. Granting that the empire can produce within itself all that it requires, a lengthened period must elapse before it actually does so, and there still remains the doubt whether natural conditions would allow the products to be supplied as cheaply by places within the empire as by places without it. Sir Rawson Rawson has pointed out (*Analysis of the Maritime Trade of the United Kingdom*) as an important consideration, "the inconvenience, expense, and intolerable delay that would be imposed upon commerce by the revival in England, and the universal adoption elsewhere, not only of a duty upon every article, but of a discriminating duty upon every article, which would necessitate the revival of the system of

certificates of origin. . . . Its re-imposition here and its universal introduction into every part of the empire, considering the immense increase of trade at the present day, would strike a blow at the freedom of commerce which would go far to counteract any advantage arising from the proposed difference in the rate of duty."

3. A plan for preferential tariffs within the empire was submitted to the colonial conference of 1887 by Mr. Hoffmeyer, one of the representatives from Cape Colony. Mr. Hoffmeyer, in proposing that on all produce imported into the United Kingdom and the colonies from foreign countries a small fixed duty should be levied over and above any duty which like imports had to pay when coming from British countries, added the important condition that the revenues derived from this additional duty should be paid into a common fund for national defence. Such a plan, he said, would "establish a feeling on the part of the colonies that whilst they were paying for the defence of the empire they were at the same time enjoying in British markets and inter-colonial markets certain advantages which foreigners did not enjoy. That would establish a connecting link between the colonies mutually as well as between the colonies and the empire also, such as is not at present in existence, and which might further develop by and by into a most powerful bond of union" (*Proceedings Col. Conference, 1887*, vol. i.). Mr. Hoffmeyer estimated that an additional duty of 2 per cent on all imports of foreign produce would give a revenue of £7,000,000, a sum which would materially lessen the burden of taxation for defence. Under existing circumstances this method would apparently bear heavily upon the mother country. Whereas more than 75 per cent of the imports of the United Kingdom are from foreign countries and therefore liable to the additional duty, the imports of the colonies are chiefly from the United Kingdom or from other parts of the empire, and therefore not in the same way liable. In the case of South Africa only about 10 per cent of the whole imports would pay the duty; in Australia 15 per cent or 20 per cent; in Canada 35 per cent or 40 per cent. The distribution of the tax would therefore not be at all in proportion to the whole volume of trade to be protected.

The fairness of the impost might be destroyed in another way. A section of the empire might adopt tariffs practically prohibitive of products from other sections. To these latter it would be no advantage that still higher duties were nominally charged on foreign products. It is to be noted, too, that the value of the additional duty as a means of raising revenue for defence would diminish in exact proportion to the attainment of the other object of preferential tariffs, viz. the self-dependence of the empire for exports and imports.

The difficulties, therefore, which confront any plan hitherto suggested, for the commercial federation of the empire, are many and great. On the other hand, if the stringent methods of protection adopted by foreign communities are maintained, there is no doubt that the minds of producers, traders, and statesmen alike will be turned more and more to seek within the empire the free commercial intercourse which is denied without. The gradual formation of a strong political bond may lead to the gradual assimilation of commercial systems. Prof. Nicholson says (*Britannic Confederation*, page 95): "Nothing is more common than to speak of the complicated tariffs and the vested interests of the newest colonies as insuperable obstacles to any general fiscal reform. As a matter of historical fact, however, in much less than a century the commercial policy of the British empire has passed, speaking broadly, from the extreme of central regulation to the extreme of non-interference, and there is, *prima facie*, no reason why a reaction should not occur if such a course is shown to be to the mutual advantage of the colonies and the mother country. The confederation of groups of colonies, such as those of Australia and of South Africa, is in agreement with it, as confederation has already been in Canada, entire freedom of country and intercourse between the different colonies will do much to reduce the existing complexity of tariffs. Any inclination towards a reduction in the protective colonies, even to the extent of lessening the number of articles taxed, would render much easier the task of arranging these tariffs on a basis of mutual advantage throughout the empire. The attitude of foreign nations on trade questions will probably go far to determine the strength of the forces which make for or against commercial federation."

[See Sir Rawson Rawson's *Synopsis of the Tariffs and Trade of the British Empire*.—*Sequel to the same*.—*Analysis of the Maritime Trade of the United Kingdom 1869 to 1889*.—*Analysis of the Maritime Trade of the United Kingdom 1889 to 1891, with special reference to the proposals for the establishment of a Zollverein*.—G. W. Medley (Cobden Club, 1892), *The Fiscal Federation of the Empire*. To *Britannic Confederation 1892*, Prof. J. S. Nicholson contributes an article on "Tariffs and International Commerce," and Mr. G. G. Chisholm one on "The commerce of the British Empire." *Blue book, No. C. 5091*, fully reports the discussions of the colonial conference of 1887 on Mr. Hoffmeyer's scheme for an Imperial Zollverein. G. R. Parkin's *Imperial Federation the problem of National Unity*, gives a chapter to Trade and Fiscal Policy. H. O. Arnold-Forster, M.P., edits *Tables published by the London Chamber of Commerce*. Much leaflet and pamphlet literature has been published by the United Empire Trade League, a body "formed for the purpose of promoting mutually advantageous trading relations between all parts of the British empire upon a preferential basis." The same may be said

of the Fair Trade League, "formed to agitate for such fiscal readjustment as shall prevent the products of foreign states, which refuse to deal with the United Kingdom in fair trade, from unduly competing in British markets with the products of home labour: and to promote, by means of the bond of commercial union between the mother country and her colonies and dependencies, an extension of trade with our own empire." The publications of the Imperial Federation League discuss impartially the merits of free trade and of preferential trade as offering each a possible basis of commercial federation. Articles touching upon the question have been numerous in most of the leading magazines during the last few years.] G. R. P.

FEE. (a) In English law the term *fee* means an estate of inheritance as distinguished from a lesser estate, but in feudal law it was used to denote that which was the "subject of tenure" as opposed to the *alod* or hereditary estate, for which the owner rendered no service to a superior (see FEOD; Challis on *Real Property*, London, 1885).

(b) Payments made by suitors in courts of justice or to the steward of a manor. The former are regulated by ancient usage or by rules of court, the latter are regulated entirely by custom (see Scriven on *Copyholds*, London, 1882). J. E. C. M.

FEE (Scots law). The right of a tenant or "feuar" of land under the feudal system of tenure: also reversion and remainder. The rules of law relating to fee are based on the principle that the fee can never be *in pendente*, for the superior, or lord, is always entitled to have a vassal.

[For the fee in the case of an heir of entail, see ENTAIL (Scotland). See Bell's *Principles of the Law of Scotland*, §§ 1713-1715.] A. D.

FEE SIMPLE. An estate "descendible to the heirs generally, that is, simply, without restraint to the heirs of the body or the like" (*Co. Litt.*, 1 b). It is the greatest estate or interest which the law of England permits any subject to enjoy in land. In theory the ultimate ownership belongs to the crown. Williams (in *Principles of the Law of Real Property*, London, 1892, p. 54), says, "A small occasional quit-rent, with its accompanying relief, suit of the court baron, if any such exists, an oath of fealty never exacted, are now, it appears, the ordinary incidents of modern socage tenure" (see Digby's *History of the Law of Real Property*, Oxford, 1884; Williams, on *Real Property*, 19th ed. 1901). The owner of a fee simple has full power of leasing or alienating it, and on his death it descends to the heir of the last person who acquired the estate otherwise than by descent.

J. E. C. M.

FEELING OF VALUE. See VALUE.

FEE TAIL. Land is held in fee tail if, according to the intention of the original grant, it

passes, on the death of any individual owner, to one of the descendants of the original donee. Land may be held in "tail general" or in "tail special." In the first case the grant is made to the use of "A and the heirs of his body," and the land descends to the next heir of the original donee according to the rules regulating the intestate succession to land held in fee simple (see HEIR); it therefore passes to females in default of males of the same degree. Gifts in "tail special" occur much less frequently than gifts in tail general, the least rare instance being a gift to the use of "A and the heirs male of his body," in which case female heirs are excluded. If the tenant in tail is in possession he can, by the execution and enrolment of a disentailing deed, convert the fee tail into a FEE SIMPLE (*q.v.*), and thus becomes absolute owner of the land. If, however, the land is in the possession of a tenant for life on the death of whom it would pass to the tenant in tail, the latter cannot bar the entail except with the concurrence of the former, who for that purpose is called the "protector" of the entail. In the case of large family estates the land is generally held by a tenant for life under the provisions of a settlement, the tenant in tail being entitled to succeed on his death; and it is usual, as soon as the tenant in tail attains his majority, to "resettle the estates" by barring the entail, giving the former tenant in tail an estate for life and making his next heir tenant in tail in remainder. It is one of the commonplaces of popular oratory to say that the free movement of land is hindered by "the law of entail"; but, as shown above, entailed land, if not forming part of a family settlement, can always be brought under the absolute control of the owner; settlements, not entails, impose fetters on land. But even these fetters can easily be broken through, as under the provisions of the Settled Land Acts the tenant for life has, subject to certain excepted parts, the power to sell any part of the settled land at his discretion; and as regards the excepted parts (mansion-house, heirlooms, etc.), he can do so subject to the consent of the court. [For further particulars see ENTAIL, LAW OF.]

E. S.

FELDAGE, see FALDAGE.

FELT, JOSEPH B. (1789-1869), was born in Salem, Massachusetts, and was educated for the Congregational ministry, from which he early retired. Throughout his life he engaged in antiquarian researches of a historical and statistical nature. To the economist the most important of his writings are: *Historical Account of Massachusetts Currency*, Boston, 1839, pp. 259; and the contributions to *Collections of the American Statistical Association*, vol. i., Boston, 1847, containing especially *Statistics of Taxation in Massachusetts*, pp. 221-596. (See Memoir by Henry M. Dexter in *Mass. Hist. Soc. Proc.*, 1875-76, pp. 113-117.)

D. R. D.

FEMALE LABOUR. The introduction of machinery and the growth of the factory system have effected considerable changes in the conditions of female labour during the present century in every country where these causes have operated. Women in the poorer classes had been accustomed to add to the family income by casual work, and by spinning or weaving for manufacturers in their own homes. Much light is thrown on the conditions of working women in England, towards the end of the 18th century, by Sir F. Eden (*The State of the Poor*, 1797), but he does not always make it quite clear whether the women actually worked at the factory or at home. Home work was the rule, and of one village Eden remarks that "employment for labourers' wives and children is much wanted; they are oftener seen basking in the sun in summer, and shivering over a stolen wood fire in winter, than in any profitable exertions of industry." The use of machinery made it economically necessary for female labour to be employed at the factory itself, and a long uninterrupted working day was enforced instead of working at irregular intervals varied by household occupations. The increased demand for female labour in the factory was accompanied by a diminished need for their services at home. The question of economic interest which the history of the employment of women should explain, is (1) the extent to which they compete with men; (2) the effect of such competition on the wages of men in the same trade; (3) the effect of the economic independence of women on the rate of wages of men in the same class, and hence on the income of the family; (4) the effect of the employment of married women in factories on the well-being of the family. The first point is the only one on which we have statistics of any general value. The regulation of factories and workshops in which women and children work (*vide* FACTORY ACTS) has made it possible to obtain returns of the numbers of males and females in such factories in the United Kingdom.

It is in the textile industries that male and female operatives are most frequently to be found employed on the same kind of work. The factory returns show a steady increase in the proportion of female to male operatives since 1895 (for which year the first compulsory return was made). But it is a mistake to suppose that this is a proof of displacement of men by women: in several towns male labour has been attracted to higher paid occupations (*e.g.* machine-making), and female operatives have therefore been more easily obtainable than male operatives.

The census of 1901, however, shows that female labour is still in the main employed in supplying the same needs as a hundred years ago; but the work is done in the factory, workshop, school, or institution, instead of in the home.

E

UNITED KINGDOM.—*Number of Female to every 100 Male Operatives in Textile Factories.*

Year.	Under 14 Years.	14 Years and under 18 Years.	18 Years and upwards.	All Ages.
1893	118	187	158	161
1896	119	187	157	161
1897	122	194	160	165
1898	121	199	163	167
1901	116	208	166	171

Occupations of Women and Girls of 10 years and upwards, according to the Census 1901.

Industry.	Number.
Domestic Offices or Services	2,055,725
Clothing	908,646
Textile	867,259
Food, Tobacco, Drink, and Lodging	872,027
Teaching	203,182
Agriculture	183,607
Paper, Books, and Stationery	114,640
Commercial	80,582
Sick-Nursing	79,002
Metals, Implements, and Conveyances	65,142
Other and Undefined	385,248
Total occupied	5,309,960

A comparison of the census returns since 1850 shows that the employment of women relative to the female population is increasing between the ages of 15 and 25, and decreasing amongst women over 25, this decrease being probably mainly due to diminished employment of married women (*General Report on Census of England and Wales, 1901, Cd. 2174*); it is also largely due to the decreased demand for the casual labour of women in their homes, and the increased demand for regular labour in the factory (*Journal of the Royal Statistical Society, June 1898*). The England and Wales census 1901 gives the number of married and widowed women returned as occupied as 13·2 per cent of their total number, while 52·3 per cent of the unmarried women and girls over 10 years of age were returned as occupied. In 1851, the only year for which similar information was compiled, the census report stated that 25 per cent of the wives in Great Britain, and 67 per cent of the widows, were engaged in some extraneous occupation.

The effect of female labour on men's wages, and the extent to which it has superseded men's labour, are difficult to ascertain. Work requiring neither muscular strength nor long training would naturally be remunerated at a low rate, whether done by men or women, and much of the work in which women have superseded men is of this nature. Thorold Rogers remarks of women's labour in the 15th century, "that women's work, when of what we may call an unskilled kind, was equally well paid with that of men," and at the present time there is ground for believing that inequality in the rate of payment is most frequently to be found when women compete with men in work requiring training and education. There is not sufficient evidence to enable us to judge of the effect of married women's labour on the wage of the husband.

For its relation to infantile mortality, see papers under this heading in the *Journal of the Royal Statistical Society. (FEMALES AND CHILDREN, EARNINGS OF; FACTORY ACTS.)*

[*Board of Trade (Labour Dept.) Reports and Home Office Factory Inspectors' Reports.*—S. Webb, *The Alleged Differences in the Wages paid to Men and Women for Similar Work.*] C. E. C.

FEMALES AND CHILDREN, EARNINGS OF. Previous to the growth of the factory system the earnings of women were principally gained by irregular work done at home for employers. Women also worked in the fields, but rarely for long periods, as such work made it necessary for them to leave their homes; it was more highly paid than those industries which were carried on by married women in their leisure hours. Adam Smith, in speaking of the domestic industries, says that "in most parts of Scotland she is a good spinner who can earn 20d. a week." Sir F. Eden (*State of the Poor, 1797*) gives the earnings of spinners in different parts of England: in Cumberland they earned from 4d. to 6d. a day; at Wirksworth by worsted-spinning 5½d to 6d. a day, and by cotton-spinning 3s. to 5s. a week; at South Tawton, in Devonshire, by serge-spinning 6d. to 7d. a day; at Colchester, children of eight or nine years of age spun for 2d. or 3d. a day, and women weavers earned 5s. to 5s. 6d. a week. At Leicester, women worsted-spinners earned 4d. to 8d. a day, and at Kilworth 6d. to 10d., children from twelve to fourteen earning about 6d. a day; at Kirkby Lonsdale, Underbarrow, Southam, Inkborough, and Sheffield the women earned 4d. to 8d. a day. Whereas the spinners at the last-mentioned town earned about 6d. a day, washerwomen earned 1s. a day and victuals. The earnings of lacemakers in Bedfordshire and Buckinghamshire ranged from 6d. to 1s. a day, a few women in Leighton Buzzard earning as much as 1s. to 1s. 3d. In Northamptonshire, the lacemakers by hard work earned 1d. to 1½d. an hour, the earnings ranging from 6d. to 1s. 2d. a day, but the ordinary earnings being about 8d. to 10d. a day. At Dunstable, the straw plaiters earned from 6s. to 12s., children earning from 2s. to 4s. a week. The total earnings in the factories were higher. At Carlisle, women in the stamperies earned 3s. to 12s. a week; at Manchester in the cotton thread from 6s. to 12s., 8s. being the average; at Birmingham in button-making, when in full work, 7s. to 10s. a week. In some cases, however, the wages in cotton mills and other factories are put at a very low rate, leaving it also somewhat doubtful whether the women worked the whole week at the factory. Thus, Eden says, that at Newark "women and children" earned 1s. to 5s. a week in the cotton thread mill; at Northampton 2s. to 5s.; but at Settle children eight to fourteen years of age earned from 1s. to 5s. or 6s. in the cotton works. Children under ten

The board of trade report on the earnings of agricultural labourers [Cd. 2376 of 1905] states that Northumberland and Durham are the only counties in England where the employment, for wages, of women at ordinary regular work in the fields is a general custom. In Scotland women are frequently employed at field work, and in the Border counties and the Lothians

the number of women workers on many farms is nearly equal to the number of men; the women workers are usually paid between 8s. and 10s., sometimes 11s. a week, with extra money at harvest and sometimes at potato-lifting. The status of women workers on the whole appears to improve.

[*Parliamentary Papers, Labour Statistics*, 1887.—*Reports of Royal Commissions on employment in Factories*, 1832, 1841-43, 1862-66, 1874-76.—*Reports of Inquiries into employment of Women and Children in Agriculture*, 1867-71.—*Reports of Select Committee of House of Lords on Sweating*, 1888-90.—*Royal Commission on Labour—Reports on Employment of Women*, 1893.—*Board of Trade Report on Employment of Women in Flax and Jute Centres*, 1898.—*Life and Labour in London*, Second Series, vols. v. to ix., edited by Charles Booth.—*The Englishwoman's Year-Book*.—Publications of Women's Industrial Councils and of the Women's Trade Union League.] C. E. C.

FÉNELON, FRANÇOIS DE SALIGNAC DE LA MOTHE (1651-1715), born at the Château de Fénelon (Perigord), and died at Cambrai. He was the author of *Télémaque*, in which very decided communistic ideas are to be found; (*Bétique*, bks. vii. and *Salente*, bks. x. and xvii.), which have led the socialists to claim the writer as on their side. Strongly-pronounced views on commercial freedom are also to be found in the *Conseils de Narbal à Télémaque*, bk. iii. These, like the communistic ideas, cease to be surprising when the reader remembers that the book is a classical romance, written (1699) not for the public, but for the moral education of the Duke of Burgundy. Fénelon expressed his opinions more decidedly when passing judgment on the policy of Louis XIV. The letter which this eminent writer addressed to the monarch (dated about 1691-1694), the instructions which he gave to the king's grandson, the Duke of Burgundy, and finally many passages in *Télémaque*, for none of which Fénelon sought publicity, show how great a mind his was. Yet Fénelon was not free from the prejudices of his age in matters of politics and religion, Augustan age though that age might be called. Fénelon was appointed tutor of the Duke of Burgundy in 1689, and archbishop of Cambrai in 1695. He was from 1693 a member of the French academy. A. C. F.

FEOD OR FEUD. Land granted to be held of the grantor or donor as opposed to land (ALOD) which a man could call his own either personally or as a member of a group or tribe. Alodial land disappeared and the words *feod feudum*, came to be applied to an estate of inheritance as opposed to an estate for life (see FEE).

[Digby, *History of the Law of Real Property*, Oxford, 1884, pp. 31, 71. See also p. 31 for the various suggested etymologies of the word. Sir H. Maine, in *Early Law and Custom*, 1883, p. 338, discusses the history of the feud.] J. E. C. M.

FEODARY. A book or roll containing lists of knights' fees showing the liabilities of the tenants in respect of military service and scutage, and serving as an assessment for any system of taxation which has the knight's fee for its basis. The best known and most important feodaries are the "The Red Book" and "Small Black Book" of the exchequer, the *Liber Feodorum* or "Testa de Nevill," "Kirby's Quest," and the "Book of Aids." Of these the "Testa de Nevill" or "Book of Fees" is the most perfect specimen: it was compiled probably in the latter part of the reign of Edward I. and contains the result of an inquisition held during the last years of Henry III. and the first of Edward I., giving a detailed list of knights' fees, crown livings, widows and heiresses whose hands were in the gift of the crown, together with the scutages, aids, etc. payable by each tenant. The "Red Book" contains a list of all the scutages levied between 1156 and 1212, and the result of the inquisition held in 1166 on account of the marriage of Henry II.'s daughter; the latter is also contained in the "Black Book"; both books contain, besides, a large amount of miscellaneous matter more or less closely connected with the exchequer. "Kirby's Quest" and the "Book of Aids" contain the results of similar inquisitions held in 1296 and 1356 respectively. DOMESDAY BOOK, the earliest known survey of the country, differs from the above-mentioned works in having for its unit the hide instead of the knight's fee. These books are not merely of historical and antiquarian interest; they afford the student of economics an excellent means of determining the distribution of wealth and population in mediæval England (see KNIGHT'S FEE). A. E. S.

FEOFFMENT. The term applied to the conveyance of a fee, i.e. an estate of inheritance, by the livery or handing over of the seizin (i.e. feudal possession) of the land. It was the usual method of transferring fees in feudal times, and though it still survives it is rarely used.

[H. W. Challis, *Law of Real Property*, London, 1885.] J. E. C. M.

FEORMFULTUM. A term of Anglo-Saxon times of doubtful meaning. It sometimes applies to contributions in kind paid to the sheriff for the maintenance of the king and his household, corresponding to the later purveyance. Sometimes it seems to refer to the rent paid to the sheriffs for the occupation of unbooked folklund.

[Stubbs' *Select Charters*.]

R. L.

FERDEL OR FERLING. A fourth part of a virgate, and, speaking generally, a sixteenth part of a hide. But as the hide contained a varying number both of virgates and of acres, the ferdel cannot be considered as a fixed quantity, though the normal ferdel was prob-

ably $7\frac{1}{2}$ acres. The holder of a ferdel was reckoned among the lower classes of villeins, and seems not to have contributed an ox to the common plough-team.

[Vinogradoff, *Villainage in England*, 1892, pp. 148, 256.] E. G. F.

FERGUSON, ADAM, LL.D. (1728-1818), began life as an army chaplain, but in 1757 became librarian to the faculty of advocates at Edinburgh. In 1759 he was appointed professor of natural philosophy at Edinburgh university, from which chair he was transferred in 1764 to that of moral philosophy, which he occupied till 1785. While he ranks rather as an historian and a philosopher than an economist, Ferguson has a fair claim to the latter title through the *Essay on the History of Civil Society* (Edinburgh, 1767, 7th ed., 1814), and the *Institutes of Moral Philosophy for the use of students in the College of Edinburgh* (Edinburgh, 1769). The first-named work consists of an inquiry into the development of civilisation from the savage state: the influence of MONTESQUIEU is clearly seen in this as well as in his other writings. The style is diffuse and ornamental. Ferguson's views in pt. iv. § 1, on the advantages and disadvantages of individuals being confined to one particular employment, are entirely in accordance with those of ADAM SMITH. Though this work was published nine years before the *Wealth of Nations*, it is not certain that Ferguson's ideas may not have been influenced by Smith, for the two philosophers were on intimate terms, and Ferguson entertained a high admiration for his friend. Several German writers, notably KARL MARX, referring particularly to the division of labour, consider Smith, but scarcely on sufficient grounds, as the pupil of Ferguson. In his *Institutes of Moral Philosophy*, which are written in a terse aphoristic manner, Ferguson deals with "arts and commerce" (pt. i. ch. i. § 9); here he admits his obligations to JOSEPH HARRIS (q.v.), to whom both he and Smith owe considerably, unless, indeed, Ferguson was acquainted with CANTILLON. He has, in the same work, a more important part (vii.) on "politics," subdivided into "public economy" and "political law." The former treats, among other subjects, of taxation, in respect to which he lays down the following six maxims: "(1) that the exigencies of the state must be provided for at any hazard or expense to the subject; (2) that in levying taxes no subject be unnecessarily burdened; (3) that the security of the subject, or that of his property, be not impaired; (4) that no useful branch of trade be unnecessarily burdened; (5) that taxes least felt as grievances be preferred; (6) that the least burdensome method of collecting taxes be chosen." Of these the 2nd, 3rd, 5th, and 6th convey some of the ideas included in Smith's 2nd, 3rd, and 4th canons, though the latter in every case cover far more ground. There is

nothing in Ferguson corresponding to Adam Smith's first maxim. But Ferguson's examination into the expediency, or otherwise, of the various kinds of taxes, divided into capitation, assessment, customs, and excise, might almost have been the text of Smith's arguments on these methods of taxation. Pt. i. ch. i. § 7 of the *Institutes* deals with population, the laws of increase being set out, in some respects, as by Malthus thirty years later. In his *Principles of Moral and Political Science* (Edinburgh, 1792)—a revision of his own lectures—pt. ii. ch. vi. he treats of such economic questions as population, wealth, revenue, liberty, "judicature," and executive power. Here also he repeats his maxims on taxation, omitting the 4th and 6th but adding, "No tax should be laid on in such a manner as to drain the source from which it is derived." He does not mention Smith's canons.

With Ferguson political economy is only incidental, and not yet dissociated from "politics"; his views, without being entirely original, are considerably in advance of his predecessors, and more generally consonant with those of ADAM SMITH. In his opinions on mankind may be seen the dawn of what is now known as SOCIOLOGY. In his philosophical system, while being, on the whole, a pupil of REID, Ferguson introduced a new theory by maintaining that the principle of perfection was of more importance than the principles of self-conservation and sociability, though he admits the influence of these latter, which had till then been held sufficient to explain human morality. Cousin considers that he was the first Scotch moralist to understand the true destiny of man. Ferguson also wrote an important *History of the Progress and Termination of the Roman Republic* (London, 1783).

[Small, J., *Biographical Sketch of A. Ferguson*, Edin., 1864.—*Encyclopædia Britannica*, suppl. to 4th, 5th, and 6th editions, art. "Ferguson," 1824.—Hasbach, *Untersuchungen über Adam Smith und die Entwicklung der Politischen Ökonomie*, Leipzig, 1891.—Cousin, V., *Cours d'histoire de la philosophie morale au 18me siècle*; 2de partie, Ecole Ecossaise, Paris, 1839-42.—Cariyle, Alex., *Autobiography*, Edinburgh and London, 1860.—Cockburn, Lord, *Memorials of his Time*, Edin., 1856.—Burton, J. H., *Life and Correspondence of David Hume*, Edin., 1846.] R. H. H.

FERM or FIRMA. The composition paid by the sheriffs in Anglo-Saxon and Norman times, for the domain and other revenues due from their shire (see FARMING OF TAXES).

[Op. the title of Madox's well-known *Firma Burgi*.] R. L.

FERRARI, JACOPO (living in 1600), born at Rovigo. Though a friar and a theologian, he maintained that payment of interest on money lent was justifiable. After giving a description of the different modes of operation then practised by the bank of St. Ambrogio at Milan, he

proved their lawfulness, and opposed and argued against the well-known objection of theologians, *pecunia non potest parere fructum nisi ratione lucri cessantis vel damni emergentis*, as it was referable to money in its primary use; in its secondary use it is a class of merchandise on which it is right to ask an interest for lawful transactions (see CANON LAW).

Digressio resolutoria in contractus usitatos a Banco S. Ambrosii civitatis Mediolani, per Fratrem Jacobum Ferrarium, Rhodiginum, in conuentu S. Mariae gratiarum Mediolani, Ordinis Praedicatorum sectorem primum Mediolani, 1623.

A. B.

FERRETTI, JULIUS (fl. 1500), a juriconsult, born at Ravenna, who applied himself to subjects referring to the revenue. Like his contemporaries Francis Lucano and John Batachio,—mentioned by Ricca-Salerno in his *Storia delle Dottrine Finanziarie in Italia*,—he considered that taxes should be for revenue only.

He wrote, *De Gabellis*.—*Quaestiones et decisiones utiles et quotidianae in materia vectigalium et gabellarum tam in terra quam in mari*, Venetiis, 1547.—*In civitate Campaniae* (Fabris), 1547, Svo.

A. B.

FERRIES (Scotland). As in England, ferries are *inter regalia*, that is, they belong to the Crown, unless granted away. In that case the grantee must keep sufficient boats running in order to meet the requirements of the public, and the rates charged, if not specified in the grant, are regulated by the justices of the peace. Rights of ferry must not be evaded or competed with. Public ferries are under the administration of the local authorities, or of bodies constituted by special acts. A. D.

FERRONI, PIETRO (19th century), an abbot of Florence, was the author of—

Rapporto sopra una lettera sulla libertà del commercio dei viveri di Monsignor Antonio Scarpelli (6 Giugno, 1804).—In *Atti della R. Accademia dei Georgofili* (vol. v. Firenze, 1804).

A. B.

FEU (Scotland). Land held under the Scottish form of the feudal tenure, copyhold in form, freehold in substance, though subject to seizure (after declaratory action) for failure to “pay the canon,” or meet the stipulated annual payments to the immediate superior. The feu is, in effect, land held under conditions of fixity of tenure for an indefinite period, fixed rent, and free sale or subletting, subject always to the conditions of the original grant. The tenant of a feu is called the “feuar,” or in popular language, or even in legal narrative, the “proprietor”; the lord or grantor, who receives a fee-farm rent, as also certain incidents or “casualties,” is called the superior, and his rent the feu-duty. He in his turn may have superiors over him, and so on up to the Crown.

A. D.

FEUD. See FEOD.

FEUDALISM, ITS ECONOMIC CHARACTERISTICS. It is difficult to state with precision the economic characteristics of feudalism; partly because the term itself is used very loosely, and partly because the conditions which it is commonly employed to denote did not long remain absolutely unchanged in any country, and were not altogether identical in any two. For the present purpose it will be allowable to use “feudalism” for the whole complex of social relations in Western Europe from about the 10th to about the 15th century. “Feudalism” must, indeed, in the strict sense of the term, be defined as an organisation resting on a peculiar system of land-tenure—a system in which ownership was divided between tenants and lords, and in which the connection as to land was accompanied by a close personal tie between lord and tenant, involving mutual rights and duties. The economic features of mediæval life were many of them the results of this system of land-tenure; but it would be pedantic to confine our attention here to those which could be definitely connected with it.

I. Early feudal society was (1) almost exclusively agricultural, and (2) the population was divided into two great rural classes, the lords of the soil (from the king and the great vassals down to the petty *seigneur* or manorial lord), and the cultivators of the soil. The husbandmen were able to spend only part of their time—as a rule, perhaps, less than half—on the cultivation of their own holdings; the rest of their time was devoted to labour upon the demesne of their lords. In the later feudal centuries these labour services were, in whole or in part, commuted for money payments: a change which, if we may judge from modern experience in eastern Europe, must have led to a great increase of production both on the servile holdings to which the tenants were now able to give the whole of their labour, and on the demesnes which could be better cultivated by hired labourers than by unwilling serfs. (3) Those lords, lay or clerical, who held many estates were obliged to devise methods by which the net produce could be forwarded to them; but with this exception each *Manor* or *Seigneurie* (*q.v.*) formed a self-dependent economic unit, scarcely connected by exchange with the outside world. (4) Such exchanges as went on, and such dues as needed to be rendered, within or without the rural group, were arranged in what later economists have called a *Naturalwirtschaft* as opposed to a *Geldwirtschaft*; payments in kind or in services being the rule instead of payments in money. (5) Social relations were also marked by a high degree of fixity. Labour dues must, at some period, have become limited; but once the limitation was made, it remained for centuries unchanged; and, again, after labour was exchanged for money, the payments rapidly became well-nigh unalterable. There

was but little movement from place to place on the part of the vast majority of the people; ascription to the soil being not only a legal rule but a social custom. Population, moreover, increased so slowly that there was little difficulty in finding room for additional members in each manor. The forces which are now summed up in the term "competition" were not, indeed, altogether absent; but they were so much weaker than they are now, and they moved within such narrow limits, that they may almost be regarded as non-existent.

II. In a feudal kingdom sovereignty tended to disappear in suzerainty. But the king, besides being the supreme overlord, was himself the immediate lord of great estates. The royal court was normally maintained by the proceeds of the royal manors. In time of war the overlord called upon his vassals for personal service. (1) Thus neither for the ordinary nor for the extraordinary needs of government was taxation resorted to unless as an exceptional occurrence,—a marked contrast alike to the financial system of the later Roman empire and to the habitual reliance on taxation of modern states. (2) Taxation being something exceptional, it was held to require the express consent of those to be burdened. Herein appeared the motive which led to the establishment of parliamentary assemblies, and the feudal organisation furnishes the key to their early constitution.

III. In the later feudal centuries trade and industry sprang up in the towns. In the absence of strong government, and under existing conditions as to communication and transportation, it was natural that the towns should not only be the centres of, but should secure control over, this new activity, and that they should seek to regulate it in their own interest. Thus, side by side with a manorial-economy, sprang up a town-economy; both to be superseded in later times by a territorial and a national economy. Under the sheltering care of municipalities and guilds arose a middle class, a *bourgeoisie*, by the side of, and after a time in a sense between, the two classes previously existing; and it is this class which has been the peculiar representative and champion of modern ideas in economic and constitutional matters.

[On the history of feudalism in Europe the most generally accepted authority of late has been G. Waitz, *Deutsche Verfassungsgeschichte* (last ed. 1880 *seq.*) This should, however, now be compared with Fustel de Coulanges, *Histoire des Institutions Politiques de l'ancienne France* (1889 *seq.*). For England the standard authority is Stubbs's *Constitutional History* (1878 *seq.*), a summary of whose conclusions as generally accepted in 1887 will be found in the essay on "Feudalism," in *Constitutional Essays*, ed. Wake-man and Hassall. Much information as to details of mediæval life will be found in the writings of Thorold Rogers, either in the *History of Agri-*

culture and Prices (vols. i. ii. 1866; vols. iii. and iv. 1882), or, in a more popular form, in *Six Centuries of Work and Wages* (1884). For Germany, Inama-Sternegg, *Deutsche Wirtschaftsgeschichte* (vol. i. 1879, vol. ii. 1891). On mediæval labour-rents light is thrown by Richard Jones in his *Essay on the Distribution of Wealth* (1881). The work of most vital importance for understanding the inner life of mediæval society is *English Village Community* by F. Seebohm (3rd ed. 1884). An endeavour is made to trace English agricultural development in Ashley, *Economic History*, (pt. i. 1888; pt. ii. 1893; in Amer. ed. vols. i. and ii.).

W. J. A.

[See FORESTS, MEDIÆVAL; KNIGHT'S SERVICE.]

FIARS PRICES (Scotland). In the month of February every year the sheriff of every county in Scotland fixes, with the aid of a jury, the average local or "fiars" price of the different kinds of grain. The prices so fixed serve to regulate the money equivalent of all payments in grain, clerical stipends, grain-rents, or of payments stipulated to be in grain sold at fiars prices, or the price of grain stipulated to be delivered without any price having been fixed.

[See Connell, *On Tithes*.—A. Smith, *W. of N.*, I. xi. p. 84, 1, ed. McCulloch.—*Add. Report of Lanarkshire Commissioners of Supply on Fiars of Grain*, 1817.—J. H. Maclean, *Fiars Prices and Produce Rents*, 1825.]

A. D.

FIAT MONEY. A colloquial term in the United States applied to paper money issued by the government as money, but not supported by coin, bullion, or any promise of redemption. It circulates because the government wills it. The advocates of this money are in extreme opposition to the HARD MONEY or bullion party. D. R. D.

FIBONACCI (*filius-Bonacci*), LEONARDO PISANO (12th and 13th centuries), the mathematician of Pisa, chiefly famous for having introduced Arabic numerals from Barbary into Italy at the commencement of the 13th century, contributed materials to the history of currency and of commerce in his work on arithmetic, entitled: *Incipit Liber Abaci composuit a Leonardo filio Bonacci Pisano in anno 1202*. In it an account is given of the various coins and their values, as well as of the different weights and measures used, when he wrote, at the principal cities of Italy. Extracts from it are given by Targioni Tozzetti (*Relazioni d'alcuni viaggi fatti in diverse parti della Toscana*, ed. 2; vol. ii. pp. 62-65, Firenze, 1768).

C. A. F.

FICHTE, JOHANN GOTTLIEB (1762-1814). Fichte, though of the first importance as a philosopher, cannot be called an economist. Yet through his philosophy he has indirectly exercised great influence on economists, his system giving in outline the theory of development worked out by Hegel, and applied by certain of Hegel's followers to economic history and theory (see HEGEL, LASSALLE, MARX, PROUDHON). Yet the direct influence of Fichte, through his writings on social and

political questions, has been much less strong than might have been expected from the power of the writer and the brilliancy of his theories.

Fichte himself had two social ideals. (a) He looked forward to a condition of human society when the state and the coercion of laws would not be needed; as regards the remote future, he is what is now called an anarchist, of the type of William Godwin (*q.v.*). (b) But he sees that men have, strictly speaking, no rights without the state, and conceives that they must necessarily pass through a stage of development in which the state and the laws shall educate them. He has, therefore, a proximate ideal, an ideal state. The best state is to him a "closed state"; it is not merely to have its separate nationality and laws, but it is to be separate in its industry and wealth. It is not to be merely "protected" against its neighbours' competition; it is to have a cordon drawn round it, and, with a few jealously-watched exceptions, it is to have no trade and hardly any intercourse with the foreigner.

The cordon once drawn, the guardians of the state can, he thinks, regulate production and trading, prices and wages. They can introduce a *Landes-geld* or peculiar national currency, valueless abroad; and they can control its value by controlling its quantity. Thus in all departments of economical life there would be hope of introducing constancy, security, and the maintenance of the chief right of man, the right to labour. Fichte means by right to labour the same sort of exclusive privilege as was secured by the old gilds to their members; and he regards this as the most important form of property. Private property in the ordinary sense of the word, family life, and even accumulation of fortunes, are not excluded; and the advantages of family life are clearly recognised. Fichte is a socialist but not a communist; and he does not try to regulate consumption.

The fire of enthusiasm always present in Fichte's writings is not wanting in the *Closed State*; but the *Characteristics*, and *Vocation of Man*, are better examples of his best manner.

Collected works ed. by J. H. Fichte, Berlin, 1845-46 (8 vols.). There are passages of economic interest scattered up and down in nearly all these volumes. *Der Geschlossene Handels-Staat* (1800) was an appendix to the *Naturrecht* (1796). Both are contained in vol. iii. of works.

The *Characteristics of the Present Age*, *The Vocation of Man*, and other of the more popular works of Fichte were translated into English (with much spirit) by the late Sir William Smith (Chapman, 1848, etc.). The translator published also a *Memoir of Fichte* that went through two editions. Fichte's chief philosophical treatise is *Wissenschaftslehre* (1794), vol. i. of works.

[Gustav Schmoller, *Litteraturgeschichte der Staats- und Social-wissenschaften* (Leipzig), 1888.—J. B. Meyer, *Fichte, Lassalle, und der Sozialismus*, 1878.—Ferd. Lassalle, *Die Philosophie Fichtes*

und die Bedeutung des deutschen Volksgeistes, *Festrede*, May 1862; also the article *Fichte* in the *Handwörterbuch der Staatswissenschaften*, by Dr. Karl Diehl; also Bonar's *Philosophy and Political Economy* (1892), bk. iv. ch. ii.] J. B.

FICTITIOUS EXAMPLES. See EXAMPLES.

FICTITIOUS PAYEE. By § 7 (3) of the Bills of Exchange Act, 1882, which by virtue of §§ 73 and 89 applies *mutatis mutandis* to cheques and promissory notes, when the payee of a bill is a fictitious or non-existing person the bill may be treated as payable to bearer. This provision has been held to apply to the case of a forged bill, when the name of a real person was inserted as payee, but the bill was never negotiated, or intended to be payable, to him; see *Bank of England v. Vagliano* (1891), 1 App. Cas. 107; and see the whole subject discussed in an article on that case in *Law Quarterly Review*, vol. vii. p. 216. In France the insertion of a fictitious payee constitutes a *supposition de nom*, and makes the bill void in hands of any party with notice of the fact. Most of the continental codes contain similar provisions. M. D. C.

FIDEICOMMISSUM. A legacy by way of informal request instead of formal command, thus differing from the strict *legatum*. The fulfilment of the request at first depended entirely on the good faith of the person to whom it was made, but it subsequently became legally enforceable on any one who succeeded to property of the testator. The advantage of *fideicommissa* was, that being originally outside the law, they were not subject to the restricted rules applicable to *legata*. Thus many kinds of bequest were valid as *fideicommissa*, though invalid as *legata*. In course of time, however, the differences between these two forms of legacy disappeared, the law relating to them being assimilated. The idea of vesting property in one person in the confidence that he will allow another to have the benefit of it is common to the fideicommissum and the trust of English law. Indeed some writers suppose that the existence of *fideicommissa* suggested to mediæval chancellors the enforcement of uses and trusts. But the analogy is only of a general kind. A fideicommissum is simply a form of bequest requesting a transfer of property to be made by some one after the testator's death, whereas a trust is much more freely enacted and may be of much wider extent.

The notion of a double estate, legal and equitable, which belongs to trusts, being derived from the separation between common law and equitable jurisdiction, is foreign to fideicommissa. From the fideicommissum of Roman law a form of family settlement was evolved in France and some other continental countries by which the property affected by it was made inalienable in accordance with feudal ideas (see MAJORAT).

E. A. W.

FIDES, BONA, MALA. These terms are frequently used in connection with the acquisition of property, a person acquiring the property of another *bona fide*, i.e. not knowing of his defective title, being sometimes in a more favourable legal position than one acquiring *mala fide*, i.e. knowing that he has no right. Thus according to Roman law only a person who comes *bona fide* into possession of the property of another can acquire ownership of it by usucapion, and in English law only a *bona fide* holder of a bill of exchange for value, not a *mala fide* holder, can recover on it. (See BONA FIDE.) E. A. W.

FIDUCIARY. A person entrusted with the management of property or business transactions on behalf of another person or other persons is said to stand in a fiduciary relation to the owner or owners of the property, or the person or persons on whose behalf the business is transacted. The more usual instances of fiduciary relations are those between trustees and beneficiaries,—principals and agents,—directors and shareholders. The nature of the responsibility varies according to the character of the relation, but the rule that a person standing in a fiduciary position must not, in the absence of special authority, derive any direct or indirect profit from his position, is common to all cases. E. S.

FIELDING, HENRY (1707-1754), playwright, novelist, and essayist, was made a justice of the peace "for the County of Middlesex and for the City and Liberty of Westminster," by the whigs, in return for his anti-jacobite journalistic writings. Some results of his magisterial experience took shape in two essays, which are not without interest to the economist from the historical point of view—*An Enquiry into the Causes of the late Increase of Robbers, etc., with some Proposals for Remedying this Growing Evil*, London, 1751; and *A Proposal for Making an Effectual Provision for the Poor, for amending their morals, and for rendering them useful members of the society. To which is added a Plan of the Buildings Proposed, with proper Elevations*, London, 1753.

"The history of Jonathan Wild the Great," says Mr. Leslie Stephen in his biographical essay, "is a powerful illustration of the facts which were going on under Fielding's nose." He was compelled to "set a thief to catch a thief," for "London at this period, and for long afterwards, was without any proper system of police. Although the population was close upon a million, the organisation for such purposes was still that of a country village. . . The weakness of the police, in fact, made it convenient for private persons to come to terms as best they could with the criminal classes," by means of advertisements promising silence if restoration of stolen property were made.

Fielding attributes the increase of theft (1) to

the growth of luxury introduced by trade (and of which as such he approves), through which the working classes had become unsettled, idle, extravagant, and addicted to drunkenness and gambling; (2) to the abuse or neglect of the laws for the regulation of the poor. Neither the receivers of stolen goods nor the thieves were prosecuted with vigour, the tortuous mazes of London buildings favoured escape, conviction was difficult, pardons were frequent, and executions made festive, not solemn, as in Holland, but "a day of glory" for the criminal.

In the second essay Fielding insists—(1) that work should be provided for the poor; and (2) that the poor should be compelled to work. He descants on the burthen and nuisance they had become, gives an early instance of "slumming," and pointed out that there was no street in Westminster "which doth not swarm all day with beggars and all night with thieves," that open insults by day were frequent and depredations in the suburban parishes of nightly occurrence. He planned, with full regulations, a county workhouse and house of correction to contain at least 5000, to which vagrants and thieves should be sent, and to which the unemployed might go. There instruction should be given in "manufactures and mysteries," and a labourers' registry kept. In support of his principles, he quotes from Sir Josiah Child, "the great Mr. Law," and "Sir William Petyt." C. A. F.

FIELD SYSTEMS. The prevailing agricultural system, in the middle ages, of England as well as of many European countries. The enclosure acts of the 18th and 19th centuries finally put an end to it in most parts of England, but a few relics may yet be found. Open-fields and town-fields are names often given to lands cultivated under this "three-field" system. One of the three fields was left fallow each year, while the other two were under crops. In some cases a simpler two-field system existed. The open-fields were divided into strips, generally of an acre or some fraction of an acre, varying in breadth, but usually, except where the irregularity of the land prevented it, a furlong in length; evidently the shape was dictated by the necessities of ploughing. Balks of unploughed turf separated the strips, and across the ends ran a common way, sometimes a path, sometimes a strip, the last to be ploughed. The cultivators, whether freeholders, villeins, or copyholders, held a varying number of strips in each field; the demesne land of the lord of the manor, and probably even the church lands, were similarly scattered in strips in each field; the tenants paid rent, in early times chiefly in produce and in labour on the lord's strips, in the later middle ages and since, chiefly in money. Ploughing, sowing, reaping, carting, felling wood, washing sheep, repairing hedges, were among the commonest services performed by the tenants. These would come

under the head of week-work, usually the labour of three days a week from the ordinary serfs; other services, not fixed in time or amount, were called boon-work. In addition to their holdings in the fields the cultivators had grazing rights on the common pasture land which was never divided into strips like the arable, and also, as soon as hay-harvest was over, on the lands temporarily enclosed for hay by the several tenants. "Lammas meadows" (see LAMMAS LANDS) still recall this old right, which points to the common ownership originally existing in the village community. Another evidence of this is the communal or manorial rule, enforced by the township or manor courts, by which common cultivation was made compulsory. The same crops must be grown by all, the same fields cultivated and left fallow in the same order. Individual ownership was *practically* established, but there was no individual freedom of action. Economically, the system was wasteful, tending to keep the standard of farming at the level of the worst farmer, giving scope for endless quarrels, and preventing the adoption of improved methods and implements. The holdings being scattered, the farmhouses could not stand in the midst of the farms, but were placed side by side in the village street. The normal holding of the better class of villein, if in the complexity of classes and holdings anything can be called normal, may be taken to have been 30 acres,—a virgate or yardland; such a tenant usually owned two oxen, and combined with other tenants to form the common plough-team. Others held a half-virgate,—bovate or oxgang, and contributed one ox to the team, while others again of the lowest class of villein had little or no share in the common fields and owned no ox, but held a hut with a small plot of garden. All gradations are found between these classes, and some villeins even held more than a full virgate. The co-operative plough-team, like the compulsory common cultivation, calls to mind the common ownership of earlier times.

The chief points which are still controversial are, the origin of the scattered holdings and of the services and rents of the peasants. But the latter, though intrinsically the more important, cannot be considered here. With regard to the former, Seeböhm argues that the strips were apportioned to the co-owners of the plough-team in a certain rotation, and in proportion to the number of oxen owned by each. Vinogradoff, contesting Seeböhm's explanation of the problem by coaration, mentions the fact that in central Russia the strips are intermixed although the plough is drawn by one horse, and argues that the large landholders, who must have owned beasts enough for at least one full team of eight oxen, would under this theory have had compact holdings, which was not the case; and that very many instances are found of small

teams of four oxen owned by two peasants, which under the system of distribution by coaration would have given the strips alternately to two tenants,—an arrangement which seems not to be found. Vinogradoff explains the intermixed strips by the desire to divide the land fairly; on the ground that, as due allowance for the uneven quality and irregular conformation of the land was nearly impossible, the plan of dividing good, bad, and indifferent land alike equally among the claimants, would be the most natural resource.

[Nasse, *Geschichte der mittelalterlichen Feldgemeinschaft in England*, 1869.—Thorold Rogers, *Six Centuries of Work and Wages*, 1884.—Seeböhm, *English Village Community*, 1883.—Vinogradoff, *Villainage in England*, 1892.]

E. G. P.

FIERI FACIAS, WRIT OF. This writ, commonly called *fi. fa.*, is the one most frequently used for the purpose of enforcing judgments for the recovery of money claims. It directs the sheriff to "cause to be made" (*feri facias*) the sum of the judgment debt by sale of so much of the debtor's goods as are required for that purpose. The sheriff's officer must be careful not to seize more goods than are required, and not to seize goods which are not the debtor's property. It sometimes happens that goods seized by the sheriff are claimed by the debtor as his property as well as by some other person; in such a case the sheriff may have the rights of the parties ascertained by a procedure known by the technical name of *Interpleader*. Formerly the sheriff was unable to take possession of anything beyond "goods and chattels" in the strict sense, but a statute passed in the beginning of the present reign (1 & 2 Vict. c. 110) enables him to seize money, banknotes, bills of exchange, bonds, and other securities for money, and to enforce such securities in the judgment debtor's place.

E. S.

FIFTEENTHS AND TENTHS. The expedient of raising money by means of a tax on personal property is said to have been first tried in England in the time of Henry II. (reigned 1154-1189), who raised money for a crusade by means of the *Saladin tenth*. Whether this was the first occasion or not is a disputed point; it is, however, certain that as soon as subsidies began to be granted by parliament, these subsidies took the form of a tax on personal property. The amount levied was some definite fraction of the value of each person's movables; the inhabitants of cities, boroughs, and ancient demesnes being taxed somewhat more heavily than the rest of the country. In the reign of Edward I. (reigned 1272-1307), the usual grant became a *fifteenth and tenth*; that is to say, a tenth of the value of all movables was to be collected from the inhabitants of cities, boroughs, and ancient demesnes, and a fifteenth from every one else. At first a special assess-

ment was made for each grant, but in the year 1334, when a *fifteenth and tenth* was granted to Edward I., a great inquisition was held, the tax being assessed with much care, extraordinary pains being taken to secure an accurate result, and after this date a *fifteenth and tenth* was a technical expression, and meant that each district was to contribute the amount fixed by the great assessment of 1334. When, owing to changes in the distribution of wealth, the burden of taxation was no longer fairly distributed by the assessment of 1334, the balance was restored by allowing a drawback of £4000, and in later years of £6000, on each *fifteenth and tenth*, in favour of waste and impoverished places; but no new assessment was made till the reign of Henry VII. (reigned 1485-1509). The whole system of taxation was altered during the commonwealth, and *fifteenths and tenths* were levied for the last time in 1626. The accounts of the assessment and collection of these subsidies, extending as they do from the reign of Henry III. to the end of the reign of Charles I., form a class of documents of great importance in economic and general history.

[Stubbs, *Constitutional History of England*, vol. ii., Oxford, 1883.—Blackstone's *Commentaries on the Laws of England*, vol. i., London, 1862.—*Second and Third Reports of the Deputy-Keeper of the Public Records*, appendix ii.—Dowell, *History of Taxation*, 2nd ed., 1883.] A. E. S.

FILANGIERI, GAETANO (1752-1788), was born at Naples. His parents, nobles, intended him for a military career, which he soon abandoned to study law and philosophy, with a strong belief in the high future of science, and a desire to discover a new system for the good of mankind. He was the king's chamberlain, and passed his youth at court. During that time he supported the reforms which the Minister Tanucci introduced in the juridical administration (1774), and published, in 1780, the two first volumes of his great work, *La Scienza della Legislazione*, and soon after (1783) the 3rd and 4th vols., which, if they brought him honours both at home and abroad, brought him enemies also. He married, and removed to Cava, where he published (1785) three volumes more, and was appointed a member of the supreme treasury council by Ferdinand IV. His impaired health and zealous work in his new office obliged him to retire to the country at Vico Equense, to recover his strength. But in vain: he died suddenly, aged 36, leaving a lasting fame.

Filangieri was one of the most important writers on economics in the latter years of the last century. He did not, as he himself declares, create new systems, or any new theory; he had a considerable acquaintance with the economical studies of his time, but it is strange he knew nothing about Smith, whom he never refers to. However, he followed no leader, standing between the physiocratic and

mercantile theories. He was a zealous partisan of free-trade and the SINGLE TAX, while he believed in the BALANCE OF TRADE; so that he may be termed eclectic, but not in the same sense as his fellow-citizen GALLIANI. Filangieri is a connecting link between MERCANTILISM and FREE-TRADE; he sustains the principle of the balance of trade, but he argues for a system of liberty both for exportation and importation, tempered only by the opinion that laws ought to be different in countries differently circumstanced; his works are thus the prelude to a historical system of social legislation. In this aspect Cossa (*Introduzione allo studio dell' Economia Politica*) justly classes him among the authors who accept the new liberal theory without giving up entirely the ancient ones, physiocratic and mercantile.

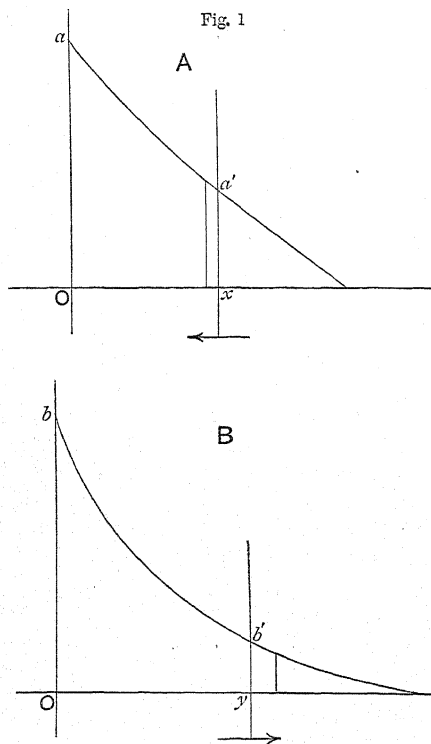
La Scienza della Legislazione, Venezia, 1822, vol. ii. The 1st ed. is of 1780, and another at Genoa, 1798.—See especially lib. ii. *Delle Leggi Politiche ed Economiche*, reprinted by Custodi in his *Collezione P. Mod.* vol. xxxii.—*Parere presentato al Re sulla proposizione di un affitto sessennale del così detto Tavogliere delle Puglie*, Napoli, 1788.—*Estratto dell' opera* [William] Playfair sul *Debito Nazionale*, Napoli, 1788. Playfair's work is *An Essay on the National Debt*, London, 1787. Filangieri, in sending his work to the Marquis Tommasi, explains that he owed to Playfair his opinions against establishing a national debt, to meet the extraordinary requirements of the state. A. B.

FILIUCOI, VINCENZO (18th century), a Jesuit, born at Siena, who summed up with intelligence the oft-repeated theological considerations about the determination of price, and discussed usury and exchange operations, faithfully keeping to the canon law. The first part of his volume treats of the theory of price, and is interesting to the economical student.

Moralium questionum de christianis officiis et casibus conscientia, auctore Vincentio Filiuccio, Lugduni, 1622. A. B.

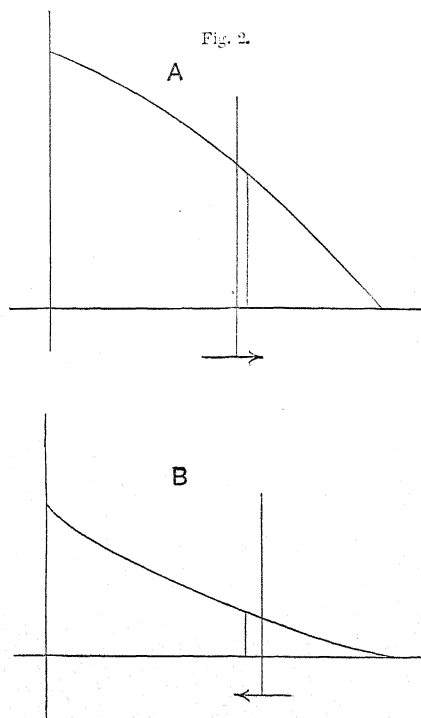
FINAL DEGREE OF UTILITY is the expression used by Jevons for the DEGREE OF UTILITY (*q.v.*) of the last increment of any commodity secured, or the next increment expected or desired. The increments being regarded as infinitesimal, the degree of utility is not supposed to vary from the last possessed to the next expected. It will be obvious, after a study of the article on DEGREE OF UTILITY, that it is the *final* degree of utility of various commodities that interests us commercially, not, for instance, their initial or average degrees of utility. That is to say (Fig. 1), if *a* is a small unit of the commodity A, and *b* a small unit of the commodity B, and *q_a* the quantity of A I possess, and *q_b* the quantity of B I possess, then, in considering the equivalence of *a* and *b* I do not ask whether A or B has the greater initial degree of utility, *i.e.* I do not compare the lines O*a* and O*b*, nor do I inquire which has the greater average degree of utility, *i.e.* I do not compare the height of the rectangle on

base Ox which shall equal the area aOx' , with the height of the rectangle on base Oy which shall equal the area $bOy'b'$, but I compare the length ax' with the length $y'b'$, and ask what are the relative rates at which increments of A and B will now add to my satisfaction. If ax' is twice the length of $y'b'$, then (since a and b are supposed to be small units, throughout the consumption of which the decline in the curves aa' , bb' may be neglected) it is obvious that $2b$ will be equivalent to a , since either increment will yield an equal area of satisfaction.



Now suppose (Fig. 2) that some other possessor of the commodities A and B, either because he possesses them in different proportions, or because his tastes and wants are different, finds that the relative final utilities of the small units a and b are not the same for him (2) as they are for me (1). Say that for him $3b$ is the equivalent of a , clearly the conditions for a mutually advantageous exchange exist. Let δ be greater than 2 and less than 3, so that $\delta - 2$ and $3 - \delta$ are both positive. Now suppose (1) exchanges with (2), giving him a and receiving from him δb . Then, (1) receives δb in exchange for a (worth $2b$ to him) and benefits to the extent of $(\delta - 2)b$, and by the same transaction (2) has received a (worth $3b$ to him)

in exchange for δb , and has benefited to the extent of $(3 - \delta)b$. The result of this exchange will be a movement of all the verticals that indicate the amount of each commodity possessed by each exchanger, in the directions indicated



by the arrow-heads; and this again will (as is obvious from inspection of the figures) tend to reduce the difference between the ratio of equivalence between a and b in the case of the two exchangers. The process of exchange will go on (δ not necessarily remaining constant) until the ratio of equivalence between a and b coincides for the two exchangers, the last exchange bringing about an equilibrium in accordance with that ratio. Such a ratio of equilibrium is a limiting ratio of exchange; that is to say, exchange constantly tends to approach such a ratio, and would cease were such a ratio actually arrived at.

Hence follows Jevons's fundamental theorem: "The ratio of exchange of any two commodities will be the reciprocal of the ratio of the final degrees of utility of the quantities of commodities available for consumption after the exchange is completed."

The final degree of utility of a commodity is thus seen to be the same as its exchange value, and a precise relation is established between EXCHANGE, VALUE IN, and VALUE IN USE

(*q.v.*), the former being the differential coefficient of the latter.

The subject is worked out in an elementary and expository manner in Wicksteed's *Alphabet of Economic Science*, where Jevons is closely followed, but the term "marginal usefulness" is substituted for "final degree of utility."

The conceptions of "degree of utility" and "final degree of utility" lie at the heart of the mathematical method of political economy, and their complete history would almost coincide with the history of mathematical economics. Incidentally the idea has been struck from time to time by sundry mathematicians, and it has been worked out independently by economists no fewer than four or five times. COURNOT (1838), DUPUIT (1844), GOSSEN (1853), and JEVONS (1862 and 1871), successively discovered and taught the theory, each one in ignorance of the work of his predecessors. In 1871 the Austrian Menger, and in 1874 the Swiss Walras (working on the basis laid down by Cournot), adopted essentially the same central conception, and since then the theory has not again sunk into oblivion. Many writers in Germany, Holland, Denmark, France, Italy, and England are now engaged in developing it. See the bibliographies and lists of writers in the appendix to Jevons's *Theory of Political Economy*, 3rd ed., and the Preface to Walras's *Théorie de la Monnaie*, 1886.

[Jevons's "final degree of utility" is the *Grenznutzen* of the Austrian school, Gossen's *Werth der letzten Atome*, and Walras's *rareté* (see *VALUE*).]

P. H. W.

FINANCES, PUBLIC. See BUDGET, THE; DIRECT TAXATION; DEBTS, PUBLIC; FLOATING DEBT; INDIRECT TAXATION; TAXATION, Articles on.

FINANCES.

General Principles of, p. 61; of United Kingdom, p. 65—I. Imperial Finance, p. 65, (a) Revenue, p. 65, (b) Expenditure, p. 66; II. Local Finance, p. 66. Colonial and Indian, p. 67. Belgium, p. 68. France, p. 68. Germany, p. 71. Netherlands, p. 75. United States, p. 77—I. Revenue, p. 77, (a) Import Duties, p. 77, (b) Internal Revenue, p. 78; (c) Other Sources of Revenue, p. 78; II. Expenditure, p. 78; III. Debt, p. 79; State and Local Finance, p. 80; (a) Debts, p. 80; (b) Revenue and Expenditure, p. 80.

[The details of the taxation in each country must of necessity, in a work like the present, become rapidly out of date, but the examples of the methods of finance given will remain of service to the student of economics by showing him the manner in which the public revenue is raised in the countries cited, which have been selected as important instances of different methods.]

GENERAL PRINCIPLES. The word "finance," originally applied to the payment of a fine (*financia, finatio*), has by a series of changes come now to denote dealings with wealth or capital, most frequently, however, in respect to the management of public or state wealth. Public finance is in fact state house-keeping or "political economy" in the earlier sense of that term, which, according to Adam

Smith (*Wealth of Nations*, bk. iv. ch. i. note), "considered as a branch of the science of a statesman or legislator, proposes two distinct objects," the second of which is "to supply the state or commonwealth with a revenue sufficient for the public services." It is accordingly concerned with the best methods of raising and applying the revenue of the state, with the administration of public property and debts, and finally with the systems of accountability and control. The forms and mode of financial organisation, and the principles on which it may best be carried on, have been gradually developed with the progress of political life and the growth of economic knowledge. The earliest societies show the direct levy of commodities and services from the members by the ruler. This simple method of supplying public wants after a time proves inadequate, and more complicated forms come into use. The sovereign obtains property sufficient to enable him to discharge the state services, or, as it was said, "to live of his own" (see *DOMAINE*), with the power of imposing taxes on extraordinary occasions. As the use of money in transactions becomes more general, the revenue is collected in the shape of coin, which is then expended for the public needs. It is regarded as the duty of the sovereign to accumulate treasure as a safeguard against emergencies, and the administrative arrangements for collection are improved and centralised. The sources of revenue are widened by the employment of various forms both of DIRECT TAXATION and INDIRECT TAXATION, the private or peculiar receipts from state property sink into a position of less importance, while on the other hand the forms of outlay expand with the increasing duties of the state. A further factor is introduced in the establishment of CREDIT, which allows of the substitution of borrowing (see *DEBTS, PUBLIC*) for the older plan of keeping a treasure. Credit also, by its use, as a medium of exchange, facilitates the collection and disbursement of the public receipts, which are readily managed through the banking system. Parallel with this movement is the application of a better and fuller method of AUDIT, and the greater power obtained by the people over finance, until, under the modern representative system, complete control has been given to the legislature over the appropriations for expenditure and the taxes laid for the obtaining of revenue. This stage, only reached by the most progressive nations within the last century, marks the highest type of financial organisation as yet known. The ruder and less developed forms still survive in backward countries, but their position only shows the course which progress has taken, and does not aid in the explanation of the best system of finance.

Theories on the subject of finance are of comparatively recent origin. At first the

financier's sole idea was to take possession of whatever articles were nearest to hand. The ulterior consequences of his action did not seem to need any consideration; therefore both in ancient and mediæval societies visible and accessible wealth formed the chief object on which the initial weight of the public burdens fell. Even high administrative organisation—as in imperial Rome—did not secure any wiser policy in the substantive methods of finance. Fiscal science took its rise with the need for increased outlay caused by the formation of the modern European system. "Statecraft," as understood by the rulers of the 16th and 17th centuries, included the management of national resources in the public interest. It therefore, more especially under the influence of the ideas of the MERCANTILE SYSTEM, sought to adjust financial rules in a way calculated to stimulate the growth of wealth. Not only the direct but the indirect effects of the fiscal policy adopted were taken, however mistakenly, into account. Thus in the *De Republica* of BODIN, certain kinds of taxation are preferred, and the rule of taxing according to "faculty" or "ability" is stated (bk. vi. ch. ii.). Modern maxims of finance in a crude form appear in the German writers of the 17th century on the subject of "the treasury," and in a more developed shape in the CAMERALISTIC SCIENCE of the succeeding one. The expediency of retaining, and the proper management of state property, the distribution of taxation, and the limits of its amount, the principle of public expenditure, and finally the questions of public treasures and debts are treated in his *Staats-wirtschaft* (2nd ed. 1758), and his *System des Finanzwesens* (1761) by JUSTI who systematised the cameralist doctrines.

But the great source of financial principles in the scientific form has been POLITICAL ECONOMY (*q.v.*) as expounded by ADAM SMITH (*q.v.*) and his successors, and either included, as in England, in the usual text-books of the science, or, as mostly in Germany, considered in a distinct department with the title *Finanzwissenschaft*. In the midst of much difference of opinion and dispute on controverted points some general principles may be found that have commanded widespread acceptance, or at least enable the opposed views to be realised and defined. Taking the several departments of finance in what seems their natural order, public expenditure first presents itself. The broad rule on this head is admittedly that of "economy." No expenditure should be undertaken unless for an adequate object, and the utility to be gained should be carefully balanced against the disutility or cost of the service. Not only must the total state outlay be weighed against the total sacrifice involved in the raising of revenue, but a due proportion between the several wants to be satisfied must be also observed. The "necessary" functions

of the state should be met before what J. S. Mill (*Principles*, bk. v. ch. i. § 1) calls the "optional" ones receive attention. "Defence," to adopt a phrase otherwise used by Adam Smith, is prior to "opulence," and therefore expenditure for security comes before that for the encouragement of industry or the improvement of art. The rule of "economy," or perhaps better, "maximum utility," holds in respect to each class of outlay. There are limits beyond which even the most necessary object cannot be wisely pursued; and most disputes as to particular cases of expenditure,—*e.g.* the recurring one as to the sufficiency of the English army and navy—turns on the question of the observance or breach of this rule, which in practice only admits of a rough empirical application. The expediency of increasing or reducing state action may theoretically be regarded as coming under the same comprehensive canon. It should be carried up to and not pushed beyond the point at which the distribution between public and private activities produces the maximum advantage. In this respect the doctrine of FINAL DEGREE OF UTILITY (*q.v.*), promulgated by JEVONS (*q.v.*), and Menger has been employed by Mazzola (*Finanza Pubblica*, Rome, 1890), Viti de Marco (*Economia Finanziaria*, Rome, 1888), and others, but owing to the complications of the factors, it seems as yet impossible to get any definite results. On the lower plane of practice the prudence and insight of the statesman form the only guarantee for successful treatment. Other laws of expenditure are those laid down by Prof. Wagner (*Finanzwissenschaft*, vol. i. pp. 76-83, 3rd ed. 1883) as (1) the law of increase in state functions with the progress of society, and (2) the preference of prevention to repression in modern state-action. These, however, are bare generalisations from the specific experience of Germany (and in a less degree other states) during the present century rather than fundamental laws of financial policy.

Of the two great classes into which the public receipts are divided, the older, "drawn from some fund which peculiarly belongs to the sovereign" (*Wealth of Nations*, bk. v. ch. ii. 1st paragraph), may consist of lands or industrial property. The weight of authority represented in Adam Smith's dictum that "the revenue which, in any civilised monarchy, the crown derives from the crown lands . . . in reality costs more to the society than perhaps any other equal revenue which the crown enjoys" (*Wealth of Nations*, bk. v. ch. ii. part 1), favours the sale of public lands, in European countries at all events, and is opposed to fresh purchases. Any exceptions, *e.g.* the case of FORESTS (*q.v.*), are made not on financial grounds, but for reasons of public policy. As a necessary result the revenue derived from this source is quite insignificant. The question of retention or

appropriation of rent by the use of taxation is treated under LAND, NATIONALISATION OF (see also SINGLE TAX).

Though the industrial receipts of the state are not declining as much as those from the DOMAINE (*q.v.*), yet up to the present the field of public enterprise is a limited one, being confined to the means of communication and transport (see POST OFFICE; RAILWAYS, STATE; TELEGRAPHS), certain municipal services, as waterworks, gasworks, and tramways, and lastly industries monopolised for the purpose of securing revenue (MONOPOLIES, *q.v.*). The contribution from this source is comparatively small owing to the great disparity between net and gross receipts. Any considerable gain, as in the instances of the English post office, and (till quite lately) the Prussian railways, is in fact a covert form of TAXATION (*q.v.*). The relatively small yield of the quasi-private or "peculiar" sources of revenue, together with the increasing expenditure for public purposes, compels recourse to a larger extent to the agency of TAXATION.

The nature and general features of TAXATION, its just division, and its real pressure on those affected, as well as the technical rules for its convenient and economical levy, belong to the articles assigned to that head (TAXATION; TAXATION, EQUALITY OF; TAXATION, INCIDENCE OF; TAXATION, MAXIMS OF, *q.v.*). There are, however, some financial principles applicable to the subject of revenue as a whole, which may best be considered here.

One very important rule has been expressed by the word "sufficiency," *i.e.* the public revenue should be large enough to meet the public wants (Wagner, *Finanzwissenschaft*, vol. ii. p. 307, 2nd ed.). No methods of taxation or fiscal management generally—no matter how perfect in other respects—are financially sound unless they provide funds sufficient to meet all usual expenses, and thus obviate the creation of a DEFICIT (*q.v.*). Productivity is therefore one of the essential qualities of a good tax system, and the net amount produced is a most material element in determining the imposition or remission of a tax. As a corollary from the principles on which the foregoing rule is based, it may be said that excessive revenue is not desirable. A large surplus leads to waste and profusion. As Prof. Adams (*Public Debts*, pp. 81, 82) remarks, "The full realisation of self-government requires a delicate adjustment of budgetary machinery, but surplus revenue acts as a weight which throws that machinery out of balance." Thus the ideal system is one in which receipts and outlay are completely balanced, provision for repaying debt being regarded as normal expenditure.

Closely connected with the rule of "sufficiency" is that of "elasticity." Adjustment of revenue in accordance with changes in ex-

penditure should always be within easy reach. Were this not so it would be impossible, owing to the fluctuating nature of public expenditure, to secure the desired balance. For this purpose the best expedient is the general INCOME TAX (*q.v.*) at a movable rate, as in England. The return from such a tax can be predicted within narrow limits, and the yield "begins almost at once" (Blunden, *Econ. Journal*, vol. ii. p. 642). Increase of duty on lightly-taxed articles in general consumption supplies the best substitute for, or (where a large increase in revenue is wanted) the best auxiliary to, the income tax. Abnormal pressure that cannot be easily met by state agencies must be discharged for the time by borrowing (see DEBTS, PUBLIC) which is practically a distribution of the burden over a longer period.

In addition to these requirements of financial policy, it is further desirable that the rules of "generality" and "equality" should be as far as possible observed. The former—flagrantly violated in the case of the privileged classes in France under the *ancien régime*—prescribes that all citizens should contribute to the public services. "Every privilege that tends to exemption from that contribution is" says Vauban, "unjust and abusive" (*Dîme Royale*, ed. Daire, p. 48). The latter rule, though admitting of various interpretations (see TAXATION, MAXIMS OF), lays down that: "The subjects of every state ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities" (Adam Smith, *Wealth of Nations*, ed. Nicholson, p. 347). Quite apart from ethical or political reasons, it is financially advantageous to secure the contributions of all citizens, and to avoid placing an undue burden—or even what may plausibly be regarded as such—on any individual or class.

Given the foregoing general principles as guiding rules in organising a financial system, it becomes a question of art to duly apply them in the most effective way. First it must be decided whether a SINGLE TAX (*q.v.*) will obtain the needed amount, and if so what form it should take; whether on land, on Revenue, or on Capital (see TAXATION). As, however, both theorists and practical men are agreed in favouring the use of more than one tax or form of tax, the selection and combination of the most suitable classes of imposts have to be considered. To what extent INDIRECT TAXATION (*q.v.*) should be employed; how it should be counterbalanced by DIRECT TAXATION (*q.v.*), and the supplementing of these main categories of revenue by other taxes, are the most important points for notice. At first, and even now to a great degree, indirect taxation in the shape of duties on commodities (CONSUMPTION, TAXES ON, *q.v.*) was the prevailing method. Imported goods were subject to

CUSTOMS DUTIES (*q.v.*), and the European monarchies generally employed the EXCISE (*q.v.*). Customs and excise combined furnish by far the largest part of the revenue of the UNITED KINGDOM (FINANCES OF), of the UNITED STATES (FINANCES OF), and of most other countries. In the first-named they are confined to a very small number of articles, but being laid exclusively for revenue, their yield is high. Elsewhere the inclusion of a much greater number does not give any substantial increase in the return, partly because customs duties are arranged with the design of giving PROTECTION (*q.v.*) to native industry, partly in consequence of the limited consumption of minor articles, the DEMAND (*q.v.*) for which is besides more elastic, and therefore easily reduced by taxation. Good policy, moreover, requires the freedom from taxation of certain classes of articles. Thus taxes on raw materials, and on absolutely necessary articles of food, are not levied in England; as the former would hamper industry, and the latter trench on the MINIMUM OF SUBSISTENCE (*q.v.*). Articles of luxury, particularly if hurtful, have since the time of Bodin been regarded as specially suitable objects for fiscal treatment, as the almost universal heavy taxation of alcohol and tobacco bears witness. Co-ordination between the excise and customs is desirable in order to avoid diversion of the course of industry or disturbance of the natural movements of consumption. The use of protective import duties or excises unbalanced by corresponding customs is equally a violation of this condition. Nor should articles for which substitutes free from duty are obtainable be subjected to taxation, and the actual duties imposed should be suitably arranged in respect to objects of interchangeable use, as *e.g.* beers, wines, and spirits, or tea, coffee, and cocoa.

Direct taxation is gradually taking a large place in the financial system. The English INCOME TAX (*q.v.*), at first extraordinary and exceptional, has become in practice permanent. The DEATH DUTIES have been increased and are much more productive. The extended use of the income tax on the continent, as in Prussia and the other German states, and in Holland, with in many cases a progressive form (see PROGRESSIVE TAXATION) are instances of the same tendency. Taxes on property, as in Switzerland, the "state" taxation of the American Union, and quite recently in Prussia, may be further cited. On the whole it appears that both income and realised wealth, especially when passing by succession, are being made to bear a greater proportion of the increased public expenditure of modern societies. By this change a partial shifting of the burden involved in supporting the state from the consumers of ordinary commodities to the recipients of the higher grades of income and the holders of realised wealth is being gradually produced.

Some other kinds of contribution are employed by the financier. By the agency of stamps, various legal and commercial transactions are charged. Of the same character are the fees for legal formalities, and more generally for services rendered by the public departments, which in some degree differ from taxes, since they are paid for service done. In their case the rates of charge have to be fixed on other than purely financial grounds.

In the working of finance it is difficult and indeed practically impossible to avoid excess of expenditure over income in periods of great pressure. Hence the growth of Public Debts (see DEBTS, PUBLIC), and the need of providing for their support and ultimate discharge (see AMORTISATION; SINKING FUND).

The systematic treatment of national finance is facilitated by the exhibition of its true position at definite intervals, and its consideration by the legislature. This is secured by the BUDGET (*q.v.*), round which has gathered a mass of conventional rules as in England, or strict legal enactments as in France, designed to secure publicity and responsibility. A thorough system of audit, verifying both the reality of alleged expenditure and its conformity to the legalised appropriations, is an additional and valuable guarantee for the sound management of the public finances.

Lastly the existence of a complementary system connected with the numerous local bodies both urban and rural must be noticed. Each of the several heads touched on above—expenditure, revenue, indebtedness, and administration—has its counterpart, though with instructive differences in LOCAL FINANCE (*q.v.*). But it is the reciprocal action of the tax system that requires to have special emphasis placed on it. When estimating the legitimacy of outlay, the distribution and proper forms of taxation, the weight of public debt, or any similar questions, it is absolutely necessary to take both general and local finance into account. Otherwise a true judgment on such points will be impossible, as some elements essential for its attainment will have been omitted.

[The literature of finance is quite overwhelming in amount. Nearly all text-books of political economy deal more or less with financial questions. There is also a mass of special works. In addition to those quoted in the text or given in the various articles referred to, the following manuals may be mentioned. McCulloch, *Taxation and the Funding System*, 1845, 3rd ed. (revised) 1863.—Thorold Rogers, art. "Finance" in 9th edition of *Encyclopædia Britannica*.—P. Leroy-Beaulieu, *Traité de la Science des Finances*, 2 vols., Paris (5th ed.), 1892.—W. Roscher, *Finanzwissenschaft*, the 4th vol. of his *System der Volkswirtschaft*, 3rd ed., Stuttgart, 1889.—G. Cohn, *Finanzwissenschaft*, (translated into English), Stuttgart, 1889.—C. F. Bastable *Public Finance*, 1903.

Among brief introductory text-books the most

convenient are L. Cossa, *Scienza delle Finanze*, 6th ed. 1893, the 3rd ed. translated into English under title *Taxation*, New York, 1888.—G. Ricca-Salerno, *Scienza delle Finanze*, Florence, 1888.—K. J. Eheberg, *Grundriss der Finanzwissenschaft*, 3rd ed. Leipzig, 1891.] C. F. B.

UNITED KINGDOM. In the articles on the BUDGET; EXCISE; and FINANCE, GENERAL PRINCIPLES OF, reference has been made to the historical development of the British financial system. Those on IMPORT DUTIES and the MERCANTILE SYSTEM explain its connection with the industrial development of the nation. The purpose of this article is to state broadly existing facts, and the principles on which the finance of the United Kingdom is at present based.

I. IMPERIAL FINANCE.

The following table indicates the growth of the resources of the kingdom since the beginning of modern finance—the time of the corn law repeal. It should be compared with the general growth of the nation's wealth—e.g. with the IMPORTS and EXPORTS. About 1887 a check seems to have come to the then sources of revenue; and the great increase in amounts appearing in more recent years is due to extra taxation.

	Revenue.	Expenditure.
1842	£46,965,630	£50,945,169
1847	51,546,264	54,502,948
1852	53,210,071	50,792,512
1857	72,787,965	76,042,570
1862	69,674,479	72,086,485
1867	69,434,568	66,780,396
1872	74,708,314	71,490,020
1877	78,565,036	78,125,228
1882	83,955,229	83,605,503
1886-7	90,772,758	89,996,752
1891-2	90,994,786	89,927,773
1896-7	103,949,885	101,476,669
1901-2	142,797,999	195,522,215
1906-7	155,036,486	149,637,664

a. Revenue.

The approximate percentages in the revenue table are:—

	Yield in 1904-5.	Per cent of whole, approx.
Customs . . .	£35,730,000	24 $\frac{1}{2}$
Inland Revenue—		
Excise . . .	30,750,000	21 $\frac{1}{2}$
Estate Duties, etc. . .	12,350,000	9
Stamps . . .	7,700,000	5 $\frac{1}{2}$
Land Tax, etc. . .	2,750,000	2
Property and Income Tax . . .	31,250,000	21 $\frac{1}{2}$
Postal and Telegraphic	19,930,000	14
Crown Lands . . .	470,000	$\frac{1}{3}$
Miscellaneous . . .	2,440,404	1 $\frac{2}{3}$
	£143,370,404	100

Though the actual receipt of this revenue is, of course, not so simple as might appear from this table, it is immeasurably more so than in any foreign country of which we are aware. Taking the heads in order, we may bring out a few further details.

The customs (import) duties are raised on about seven chief articles:—

Tea	which gave in 1904-5	£3,271,866
Coffee	" "	173,485
Spirits	" "	3,822,196
Wines	" "	1,185,508
Tobacco, etc.	" "	13,184,767
Currants, etc.	" "	442,062
Sugar	" "	6,106,387

The process by which this purely revenue tariff has been attained will be found sketched in the articles on COMMERCE; FREE TRADE; and IMPORT DUTIES. For about twenty years it remained much the same and produced annually about £20,000,000. Its recent increase may be described as due to the war taxation, and is in great measure the result of the duty re-imposed on sugar in 1901.

The excise remained fairly constant, varying from £25,000,000 to £27,000,000 for many years; it has been increased lately. The chief items in 1904-5 were—

Spirits . . .	£17,806,983
Beer . . .	12,678,832
Railway Tax . . .	354,891

The spirit and other licenses, which up to 1889 produced £3,500,000 for general revenue, were in that year, all but a small portion, handed over to the local authorities. It is only since 1881 that an excise duty has been levied direct on beer—previously it was imposed on the materials used for brewing.

The death duties, since 1894, when Sir W. Harcourt recast and increased them, have been separated from "stamps"—producing a large revenue. The property and income taxes and the inhabited house duties are amongst the most important items in the national taxation. The income tax is at once the most convenient and the most notoriously unfair. Originally imposed as a temporary expedient, it has become one of the chief engines in the hands of the chancellor of the exchequer. A penny in the pound on the income tax produces a sum which may now be put at £2,500,000, but tends to increase with the wealth of the country, and the care taken in collecting the tax. The principle of the tax is excellent, but, as levied, it excites a good deal of grumbling and invites evasion. If it were arranged on a scientific basis, it would be more satisfactory and productive. The main burdens on houses and land belong to local finance.

The revenue of the postal and telegraph services are the other large items in the public revenue. They are rather to be considered as

returns for services rendered. The net revenue on this account, after deducting expenses, averaged over £4,000,000 for five years past: obtained almost entirely on the inland post.

The incidence of the above taxation, which is an important point for the financier, will be found on examination to be in a marked degree heaviest on the middle classes, *i.e.* persons of moderate means: it bears much more lightly on the working classes and the very wealthy.

Before passing to expenditure, it is well to explain that the term CONSOLIDATED FUND (*q.v.*), originally used in its proper sense, has, owing to the great changes in the raising of revenue, come to be practically a term earmarking that expenditure which was originally assigned to the fund—notably, the charges of debt and the salaries of the judges.

b. Expenditure.

The expenditure may be classified under the heads—

Charges of Debt	£27,000,000 in 1904-5 or 19%	
Civil Administration	14,607,902	10%
Payments to Local		
Accounts	1,156,867	3%
Education	14,235,728	10%
Naval and Military	66,270,000	47%
Collection of Revenue	3,093,000	24%
Postal, etc., Services	15,593,000	11%
	£141,956,497	100

The article on DEBTS, PUBLIC, gives a sufficient view of the history of the English debt. The chief points for the financier to consider are the weight of its burthen and the permanency of its charge. Sir R. Giffen, some years ago (*Essays in Finance*), pointed out that it would not require an insupportable effort to pay off, in a few years, a burthen which is less than half the national income. But English financiers have preferred more gradual measures. The annual charge was diminished by about £4,000,000, through Lord Goschen's conversion in 1888, and again by the falling in of terminable annuities in 1900. But the South African War brought it up again. Taking debt as the cost of past wars, and our naval and military expenditure as the cost of insurance against the future, we have the enormous sum of £93,270,000 annually as the result of national jealousies—about double the charges of administration.

Of the fighting expenditure the army took materially more than the navy up to 1894; in 1904-5 it took £29,000,000 against £36,830,000. This expenditure is one of the most anxious subjects with which the chancellor of the exchequer has to deal, the economy of British administration in this respect having been seriously impugned. Of civil administration the chief items on the accounts for 1903-4 were—

Public Works and Buildings	£2,554,645
Civil Departments	3,006,866
Law, Police, Prisons, etc.	4,552,030
Diplomatic Service, etc.	619,839
Colonial grants in aid	1,514,144

From this it will be seen that the administration as a rule is fairly economical, though it has risen enormously in the last ten years: the expenditure in connection with the colonial empire has been multiplied ten times owing to the African protectorates, for most of the British colonies are altogether self-supporting. On the other items we need only remark that education is an annually increasing charge—it has almost trebled in fifteen years—and that the cost of collection of revenue is moderate.

The control of this expenditure is secured by the audit department, and by the annual investigation of the public accounts committee appointed by the House of Commons.

A word may be given to the actual financing of the United Kingdom. Although a large balance is kept in the exchequer, it is constantly necessary to borrow in advance of revenue for short terms, in order to meet the regular demands of expenditure. This necessarily gives rise to EXCHEQUER BILLS, etc.

II. LOCAL FINANCE.

Some years ago Lord Goschen described the local finance of the United Kingdom as a complete chaos. The chief sources of receipt for the purposes of local expenditure are the rates on houses and property, reimbursements for gas and water supplied, and various tolls and dues in markets and otherwise. Some of these last, *e.g.* the toll on fish coming into Billingsgate Market, are objectionable as being practically an *octroi* on food.

The total receipts of local authorities have more than doubled since 1892; for 1902-3, exclusive of loans from or under the control of the central government, they were £93,935,417, of which more than half, £50,328,412, was from rates; the amount of government contributions was £12,782,803.

The expenditure of these sums fell under the following chief heads:—

Poor Relief in the Parishes	£13,609,870
Municipalities—Police and General Administration	79,995,031
Counties—Police and General Administration	7,735,530
School Boards, etc.	13,488,433
Highway Boards, etc.	2,183,270
Harbour, Pilotage, etc.	4,819,498

These amounts include loan expenditure.

The average annual expenditure on local purposes has grown till it approaches that of the general government, so that the total burthen of public expenditure on the people of

Great Britain is at present about £235,000,000. (For further details see LOCAL FINANCE.)

[The great parliamentary return 366 and 366-1 of 1868-69, often called *Chisholm's Analysis*.—The *Statistical Abstract of the United Kingdom*.—Reports of the Public Accounts Committee, etc., etc.] C. A. H.

COLONIAL AND INDIAN. Finance is a wide term, somewhat indefinitely used; and in a short article it will not be possible to do more than indicate briefly the basis on which the finances rest in the British possessions. The general objects of the public expenditure of all these possessions are much the same: civil and judicial administration requires a considerable fund; public works are usually the most important item apart from this; services for the public benefit, such as post offices and railways, in some cases form a large item. In many colonies and India the charge for debt is heavy. The point of view from which it is most interesting to examine the finances of each possession is that of the method of raising the revenues; and the different methods in vogue lend themselves to a rough classification.

(1) Import duties have a very decided preponderance in many colonies: e.g. Canada, Newfoundland, the West African Colonies, the West Indian Colonies; also West Australia.

This is illustrated by the following figures:—

	Total Revenue, 1903-4.	Revenue from Customs.
Canada (Dominion)	£14,526,573	£8,866,647
Newfoundland	516,691	464,157
West African Colonies	1,387,096	800,234
Jamaica	883,450	349,576
West Australia	3,978,468	1,094,845

This method of raising revenue was usually the easiest and adopted first (see **IMPORT DUTIES**): in colonies where great natural resources have not recently been developed, the customs revenue still remains the mainstay of the financier, and in most temporary emergencies the resource is an addition to the customs duties, often merely to the *ad valorem* duties. In the West Indian colonies there have from time to time been proposals to lighten the customs dues and replace them to that extent by direct taxation; but these proposals have had little success.

(2) In several of the colonies, while the customs revenue forms a very important item, there are others which run it close in point of yield. Such are almost all the Australian colonies, the Cape, the Mauritius, Falkland Islands, and Fiji. The competing items vary so much that it would be difficult to make a classification which was not cumbrous. Excise and liquor licenses in some cases, and land revenue of different kinds in others, are the chief sources. Indeed, it is true of many colonies in the first group above indicated that excise is an important item.

(3) In a few colonies, the chief of which are

the Australian, land and royalties on minerals and timber contribute a substantial amount to the annual revenue; in the Falkland Islands the rental of crown lands produces nearly half; in India the land revenue is the mainstay of the finances, producing in 1903-4 over £20,000,000 out of £83,750,000, and more if the indirect sources of revenue from land, as timber royalties, etc., be included.

(4) Revenue from public works, generally railways, swells the total considerably in many colonies. Natal is perhaps the best instance, where under this head the accounts have almost £2,500,000 out of £4,160,145 in 1903-4. But the item requires careful scrutiny in all cases, in the light of the corresponding expenditure under the other side of the account, and very often of the charge of debt. It may be said generally that in no place at present is there a net revenue from such works.

The most satisfactory form of revenue is doubtless that derived from land. It is on this ground that Strachey (*Finances of India*, ch. i.) claims that India is one of the least heavily burdened countries in the world. It is a good policy to keep the land as far as possible in the hands of the state or under some sort of state control, and in her colonies, England, applying traditions from her own history, has only slowly realised this. Most colonial governments have parted with the freehold of the land, and have sold, or granted, rather than rented it; afterwards, when fresh need of revenue has arisen, they have had recourse to taxation.

Various methods of raising revenue in the British possessions have of late years been the object of attack in this country—notably the opium and salt revenues of India, and the paddy tax in Ceylon. For the controversies which have raged round the import duties, see article on **IMPORT DUTIES**. Tonnage dues are generally disappearing. Besides the customs, the most thoroughly established methods of raising revenue are by excise, spirit and still licenses, stamps, and taxes on land and houses,—all of which are very general.

An important factor in the finance of all countries is their public debt; in nearly all the colonies the debt has been contracted for works of public improvement, which should eventually not only pay the charges of debt, but yield a revenue beyond; in the case of the crown colonies the debts will be repaid within a limited period, leaving the colonists with valuable assets in the completed works for which the loans were raised. In some of the more important colonies, especially the Australian, the charge for debt is large even in proportion to revenue and population; in the smaller colonies it has been kept comparatively light.

In India, Mauritius, the eastern colonies, and some others, the presence of a silver currency has introduced special difficulties of finance.

The control of finance is entirely in the hands of the local government in colonies with responsible government; in the other colonies it is supervised generally, and in the crown colonies very carefully, by the imperial colonial office. C. A. H.

BELGIUM. (Amounts in francs converted as 25=£1.) According to the thirty-fifth volume of the *Annuaire Statistique de la Belgique*, published by the ministry of the interior, the total actual receipts of the state in 1903 were subdivided as follows:—

	Millions of francs.	£
Taxation (a)	239	9,560,000
Piages (tolls) (b)	241	9,640,000
Income of State Property	18	720,000
Reimbursements	6	240,000
	<u>504</u>	<u>£20,160,000</u>
Extraordinary and Special Resources	123	4,920,000
	<u>627</u>	<u>£25,080,000</u>

(a) Taxation.—The principal items are—

	Millions of francs.	£
Contribution foncière (on real property)	26	1,040,000
Contribution personnelle	22	880,000
Patentes (Trade Licenses)	10	400,000
Customs	42	1,680,000
Excise ¹	71	2,840,000
Registration, Stamps, etc.	41	1,640,000
Donation and Death Duties	22	880,000

(b) *Piages* (tolls) comprise the gross proceeds of the State

Railway	213	8,520,000
Post Office	18	720,000
Telegraphs	10	400,000

The extraordinary receipts consist mainly in the proceeds of public loans.

For the same year the actual expenditure was—

	Millions of francs.	£
Interest on Public Debt	136	5,440,000
Dotations (Civil List)	5	200,000
Ministry of Foreign Affairs	3	120,000
Ministry of Agriculture	12	480,000
Ministry of Railways, Post and Telegraph	165	6,600,000
Ministry of Finance and Public Works	36	1,440,000
Ministry of War	62	2,480,000
Ministry of the Interior and Public Instruction (the latter 21 millions, £840,000)	33	1,320,000
Ministry of Justice (includes 7 millions for religious endowment)	27	1,080,000
Ministry of Labour and Industry	17	680,000
Sundries	4	160,000
	<u>500</u>	<u>£20,000,000</u>
Special Services	114	4,560,000
	<u>614</u>	<u>£24,560,000</u>

¹ Includes Foreign wines 5 (£200,000), alcohol 45 (£1,800,000), beer and vinegar 12 (£480,000), sugar 6 millions of francs (£240,000).

Special services include public works executed at the expense of the state; thus, from 1834 to the end of 1903, 2099 millions of francs (£84,000,000) have been spent on railways owned by the state.

The subdivision of administrative functions between the different ministries is not exactly the same as in France; the separate ministry of railways was created in 1884, and is justified by the fact that the Belgian state owns the greater part of the railway lines—4025 kilometers, or say 2500 miles against 531 kilometers, or 330 miles worked by companies in 1903.

The Belgian financial system has much the same basis as the French system (see below). Taxation, however, is much lighter, since the net proceeds of the state railways ought to be deducted and the amount paid per head in taxation is not one-half of what it is in France. State monopolies do not exist; there is no tax on the income, and the custom duties are generally arranged with a purely fiscal aim.

Belgium has no *universal* budget, and its finance presents one particular feature. Since 1859, the *octrois* or municipal duties on consumption levied at the entrance of the towns (see OCTROI) have been suppressed, and a special fund, called the *Fonds Communal*, instituted to compensate the loss to the municipalities. This fund is provided for by a fixed percentage on the proceeds of the postal receipts and of certain excise or custom duties (sugar, coffee, alcohol, wine, and beer). This distinct attribution to local purposes of a specified part of the general national revenue constitutes an exceptional departure from the leading principles in Belgian and also French finance.

The Belgian public debt amounts to about 3000 millions of francs (say £120,000,000 sterling).

[Apart from official publications such as the *Annuaire Statistique* already mentioned, the *Moniteur Belge*, and the *Comptes Généraux de l'Administration des Finances*, much information concerning Belgian finance will be found scattered over M. P. Leroy-Beaulieu's *Traité de la Science des Finances*, and also occasionally in the French official *Bulletin de Statistique*. For the period 1830-70, a general sketch was published in the *Patria Belgica* (vol. ii. *Belgique Politique et Sociale*, pp. 865-903), Brussels, 1873. The English reader may be referred to Messrs. Le Hardy de Beaulieu, and Couvreur's contributions to the *Correspondence relating to the Budgets* published by the Cobden Club. See also Ernest Dubois, *Étude sur le système belge en matière de budget de l'État*, Paris and Brussels, 1904.] E. CA.

FRANCE. (Amounts in francs converted as 25=£1.) Practically it is only since the time of Napoleon I. (first consul 1799, proclaimed emperor 1804), that regular estimates of receipts and expenditure have been yearly prepared; and only since the restoration of

the Bourbons (1814), that these have been submitted to the effective preliminary approval of the French parliament. The *Budget des Voies et Moyens* (ways and means) is drawn up by the minister of finance; the *Budget des Dépenses* (expenditure) by each minister for his own department; it is divided into chapters, corresponding to each particular branch of the service, and since 1871 each chapter must be voted separately. The vote opens a *crédit* (supply) to the minister, who is now no longer allowed, as under the second empire, to effect transfers (*virements*) from one chapter to another. In case of need, *additional credits* are granted after the vote of the *budget*; these sometimes reach a considerable amount (15 millions sterling in 1885), and are a permanent cause of instability in the financial equilibrium. The whole of the expenditure and receipts must be voted yearly, and first by the lower chamber.

RECEIPTS.—In the *Rapport sur le projet de loi portant fixation du budget général de l'Exercice 1906*, the total estimates amount to 3704 millions of francs (£148,160,000). The main elements of this revenue are given as follows in millions of francs and round numbers:—

	francs	£
Direct taxation	554 mill.	22,160,000
Indirect taxation	2044 „	81,760,000
State monopolies and manu- factures	842 „	33,680,000
State property	61 „	2,440,000
	<u>3501 mill.</u>	<u>140,040,000</u>

The words “direct” and “indirect taxation” are, of course, used in their French administrative and purely empirical sense, without regard to the ultimate incidence of the tax itself.

Direct taxation includes, for instance, taxes on clubs, royalties paid by mines and collieries, and the *contribution des Patentes*, or “trade licences.”

The principal direct taxes are the—

	francs	£
<i>Contribution foncière</i> } Buildings 92 mill.	3,680,000	
(Tax on real pro- } Land 105 „	4,200,000	
perty)		
<i>Contribution personnelle et mobilière</i> (personal taxes and on house-rent)	101 „	4,040,000
Doors and windows	66 „	2,640,000
<i>Patentes</i> (trade licences)	138 „	552,000

It may perhaps be as well to notice here parenthetically that these four direct contributions provide indirectly the means for local expenditure. To the principal of these are added *centimes additionnels*, or an additional percentage, the greatest part of which is handed over to the local authorities, departmental or municipal. The former may be considered as having no other revenue. The municipalities' share amounts to 214 millions (£8,560,000); and in towns, the *Octroi* (g.v.) or municipal duties on consumption yielded in 1904 about 271 million francs (£10,840,000).

The legislature at the time of the outbreak

of the great revolution was eager to follow the teachings of the *Physiocrats* and to repeal indirect taxation. But necessity compelled the reversal of their plan, and direct taxation now scarcely provides one-sixth of the receipts, whilst indirect taxation, under which head are included stamp and registration duties, provides about two-thirds.

The revenue derived from indirect taxation may be summarised thus:

	francs	£
1. Registration duties	594 mill.	say £23,760,000

The principal branches of these duties yield—

	francs	£
Registration on transfer of real property	133 mill.	5,320,000
Death duties	243 „	9,720,000
Duties on donations (mostly marriage settlements)	22 „	880,000
Transfer of personal property	72 „	2,880,000
Fixed duties on judicial acts	23 „	920,000
Mortgages „ „ „	11 „	440,000
2. Stamps (on commercial bills and cheques 41 mill. of francs (£1,640,000)	186 „	say 7,440,000
3. Tax of 4 per cent on the dividends of joint-stock shares and bonds	84 „	say 3,360,000

(The interest on the French national debt, mortgages, private loans, and commercial profits of private partnerships remain free.)

	francs	£
4. Customs	436 mill.	17,440,000
(Of this 386 mill. (£15,440,000) on imports)		
5. Sugar	150 „	6,000,000
Other “Contributions indirectes,” or excise	608 „	24,320,000
Alcohol	358 mill.	14,320,000
Wine and cider	65 „	2,600,000
Beer	14 „	560,000

State duties on the so-called hygienic drinks—wine, cider, and beer—have been reduced. Salt pays to the customs and excise together 34 millions of francs (£1,360,000). The *Contributions Indirectes* also comprise the duties on transport and communications by rail, the latter 67 millions of francs (£2,680,000).

In the next division of the budget of receipts appear the gross proceeds of state monopolies and state manufactures for a total amount of 842 millions of francs (£33,680,000), subdivided in the following way:—

	francs	£
Matches	35 mill.	
Tobacco	446 „	498 mill.
Gunpowder	17 „	
Post Office	246 „	
Telegraphs	45 „	326 „
Telephones	35 „	1,804,000
Net revenue of railway lines belonging to the state	14 „	560,000

The working expenses or cost of production come in under sundry headings in the *Budget des Dépenses* (expenditure). The net revenue of the post and telegraphs is generally taken at about 50 millions of francs (£2,000,000); and tobacco is calculated to yield net more than 300 millions (£12,000,000).

Of the 61 millions of francs (£2,440,000) derived from the state property, more than one-half is derived from forests owned by the state. The present property of the state plays thus a very secondary part in French finance, but towards the middle of the 20th century it will vastly increase, as between 1950 and 1960 the *concessions* of most of the railway companies will expire, and their lines and buildings become the property of the state. About 50,000 kilometres (30,000 miles) are worked at the present time, and yield a revenue of 687 millions of francs (£27,480,000).

EXPENDITURE.—The following table gives the amount of the *crédits* or supplies granted to the different ministries:—

	francs 1510 mill.	£ 60,400,000
Ministry of finance (1226 millions, or £49,040,000, for interest of the national debt)		
Ministry of justice	37	1,480,000
Ministry of foreign affairs	17	680,000
Ministry of the interior	88	3,520,000
Ministry of the navy	325	13,000,000
Ministry of war	719	28,760,000
Ministry of the colonies	110	4,400,000
Ministry of public instruction, fine arts, and religious wor- ship	307	12,280,000
(Instruction 250 mill., arts 14, religious worship 48)		
Ministry of commerce, industry, post and telegraphs	813	12,520,000
Ministry of agriculture	45	1,800,000
Ministry of public works	230	9,200,000
Total expenditure	3701	£148,040,000

Owing to the voted separation of church and state, the religious expenses will in future budgets be reduced to temporary pensions and repairs to historical monuments.

The budget of Algeria is, since 1900, detached from the budget of France proper.

In appearance the budget of 1906 is thus brought into a state of strict equilibrium; but even assuming that the actual receipts will reach the amount of estimates, and although the principle of the *universality* of the budget of expenditure, namely, that it ought to comprise the whole of the foreseen expenses, has been constantly acknowledged in theory, it is in fact often disregarded, neither is sufficient account taken of future expenditure entailed by previous legislation. The creation of *extraordinary budgets* and funds (*caisses*), supposed to deal with temporary and special expenditure, has been the expedient resorted to. The creation of the *Compte de Liquidation* immediately after the disastrous war of 1870, when France had to pay an enormous war indemnity and to reconstruct the whole of its military establishment, was no doubt perfectly justified. But, principally after 1882, the institution of such funds has had for its object the concealment of real deficiencies, over 28 millions sterling in 1883, incurred on account of public works

undertaken on a gigantic scale, and rather premature reductions of taxation. However, since that time there has been a steady and laudable tendency towards financial honesty; and the subsidies to railway companies, under the form of guarantee of a minimum rate of interest on capital invested, are now included in the general budget.

It cannot be said that any definite method has been adopted towards assessing taxation so as to divide its burden between property and income. Only about 40 millions of francs (£1,600,000) are levied directly on what may be called luxuries, but affluence is indirectly, though effectively, reached through the duty on house-rent.

No such thing exists as a general income-tax on the English model; professional incomes contribute through the operation of the *patentes*, (trade licences), and the income derived from securities other than the national debt or mortgage, through the tax of 4 per cent on the dividends of *valeurs mobilières* (transferable securities), but other incomes generally escape taxation. After the events of 1870-71, 750 millions of francs, 30 million sterling, of new taxes were suddenly wanted, and the aim of the government was to find out the line of least resistance, a circumstance which explains, and more or less excuses, the absence of methodical foresight. Whenever the necessity of levying an increased amount of taxation occurs, the want is felt of a form of tax, such as the English income-tax, which can be easily adjusted to the exigencies of the moment. New taxes are devised almost at hay-hazard, sometimes according to the crotchets of influential members of the lower house, who unhappily too often and too freely indulge their initiative power in financial matters. In France, customs-duties, it is well known, are as much a protectionist as a fiscal machinery.

After the Franco-German war, a large annual provision (200 millions of francs or 8 million sterling) was carefully made for the paying off of the national debt; but for several years scarcely any other reduction has been made except the paying off of annual quotas of the terminable debt, *rente amortissable*, instituted in 1878 when the extensive scheme of public works known as the *plan Freycinet* was launched. This terminable debt scarcely represents one-eighth of the national liabilities. Some, however, contend that at the expiration of the *concessions* of the railway companies already mentioned, the net proceeds of these lines will cover the interest on consolidated debt, but this appears exaggerated.

No special quota of the general revenue is reserved for local expenditure, although the state largely contributes to several of its branches.

To conclude, a summary view of the state of French finance is here given:

	frances	£
Budget (1906)	3,704 mill.	148,160,000
Public debt	32,000 „	1,128,000,000
General taxation	2,900 „	118,000,000
Local taxation	800 „	32,000,000

In 1869, the last normal year before the war, the parallel figures were:

	frances	£
Budget of expenditure	2,014 mill.	80,560,000
Public debt	12,000 „	480,000,000

[A clear and handy summary of the budget of 1893 is given in M. Bidoire's *Tableau résumé du Budget de 1893* (Paris, 1892). For general works see the *Dictionnaire des Finances* (Paris, 1888) published under the direction of M. Léon Say.—The *Nouveau Dictionnaire d'Economie Politique* (1892).—Paul Leroy Beaulieu, *Traité de la Science des Finances* (7th edition, 1905).—René Stourm, *Le Budget*.—Bidoire et Simonin, *Les Budgets Français, étude analytique et pratique*, 3 vols., Paris (1895-1897).—A. Neymarck, *Finances contemporaines* (1872-1904), 3 vols.—Richard de Kaufmann, *Les Finances de la France* (translated from the German into French).—Henri Germain, *Discours Parlementaires sur les Finances*.—D'Audiffret, *Système financier de la France*.—Boileau, *Fortune Publique et Finances de la France*. For modern times.—Esquirol de Parieu, *Traité des Impôts*, 4 vols., Paris, 1877.—K. J. von Hock, *Die Finanzverwaltung Frankreichs*, 1887 (translated into French under the title *L'Administration financière de la France*, 1859).—Ad. Wagner, *Finanzwissenschaft*, vol. iii.—Charles Gomet, *Histoire Financière de l'Assemblée Constituante, de l'Assemblée Législative et de la Convention*, 3 vols., Paris, 1896-1902.—The *Bulletin de Statistique*, published by the ministry of finance, is a rich source of statistical data, and the English reader will find a great quantity of condensed and well-digested information on French finance in Professor Bastable's *Public Finance* (1892).

For French finance prior to the Revolution of 1789 see Fromenteau, *Le Secret des Finances*, 1851.—Moreau de Beaumont, *Mémoires Concernant les Impositions et droits en Europe et en France*, 5 vols., 1768-1789.—Le Febvre de Bellande, *Dictionnaire Général des Aides*, Paris, 1760.—Necker, *De l'Administration des Finances*, 3 vols., 1784.—Clamagérat, *Histoire de l'Impôt en France*, 3 vols., 1867-76.—René Stourm, *Les Finances de l'ancien Régime* (1885); and an article under the same title in the *Nouveau Dictionnaire d'Economie Politique*.—Bouchard, *Le Système Financier de l'ancien Régime* (1891).—3 vols. in the *Encyclopédie Méthodique* (1784-1787).—Vuitry, *Études sur le Régime Financier de la France avant 1789* (from the 11th to the 15th century).—Jacqueton, *Documents relatifs à l'histoire financière en France (1449-1523)*.—Forbonnais, *Recherches et Considérations sur les Finances de la France depuis 1598 jusqu'en 1721* (Bâle, 1758), and the bibliography published by M. Stourm, *Bibliographie historique des Finances de la France au 18^{me} siècle*, 1895.] E. ca.

GERMAN EMPIRE and PRUSSIA (Amounts in marks converted as 20=£1). In Germany the functions of government are partly performed by the confederation of all the individual states, the German empire, and partly belong to these individual states themselves. These are (Elsass-Lothringen included), twenty-six in number and extremely different in size, ranging between 37,000,000 and only 44,000 inhabitants. Besides, there exists in Germany as elsewhere the local finance connected with the cities and country districts which defray their expenses independently.

I. THE FINANCES OF THE EMPIRE.—The chief expenditure is that for the army and navy, the organisation of which belongs to the confederation, not to the particular states. The Bavarian army only has in time of peace its separate financial administration; but the money spent by the Bavarian government on its army is paid to it in a lump from the exchequer of the empire. Among other expenses are those of the foreign office, including diplomatic service, the high court of judicature, to which under certain conditions appeals lie from the courts of the individual states both in civil and criminal cases, and the imperial home department. Among the expenses of the latter department are those for the economic interests of the country, such as the subvention of mercantile shipping, and workmen's insurance, etc. The fiscal year runs, as in England, from 1st April to 31st March. The amount of the expenditure is voted yearly by the federal council and the parliament. Among the expenditure a distinction is made between recurring and exceptional items. Among the last named, a further distinction has been made for some years between "exceptional expenditure of the ordinary budget," and "exceptional expenditure of the extraordinary budget." The expenditure of the former description is that which, like the recurring expenditure, is defrayed out of the ordinary revenue, while, on the other hand, the "exceptional expenditure of the extraordinary budget" is raised by loans or from special funds. In reality the whole difference between recurring and exceptional expenditure is very slight, because though the special occasion calling for any particular exceptional expenditure does not recur in every year, the total amount even of this class of expenditure does not vary much from year to year. The consolidated debt of the empire is £196,000,000 (1906).

For the fiscal year 1894-1895 the following expenses of the Empire have been voted:—

(The statement does not include the expenditure for the postal service—which is deducted from the revenue under the same head—see p. 73—nor the part of the expenditure for pensions derived from the income of the Invalid Fund.)

Expenses, Empire of Germany.

Item of Expenditure.	Recurring.	Exceptional.		Total.
		Ordinary Budget.	Extra-ordinary Budget.	
Chancellor's office and Imperial Diet and Foreign office	£ 544,000	£ 238,000	£ ..	£ 782,000
Home Department	1,360,000	215,000	1,086,000	2,611,000
Army	24,001,000	1,817,000	4,638,000	30,554,000
Navy	2,535,000	950,000	212,000	3,697,000
Administration of Justice	103,000	50,000	..	153,000
Finance Department	254,000	8,000	..	262,000
Railway Department	17,000	..	630,000	647,000
Imperial Debt Service	3,587,000	..	..	3,587,000
Audit Department	32,000	..	..	32,000
Pensions, etc. (chiefly Military, but not including pensions derived from Income of Invalid Fund)	2,428,000	..	..	2,428,000
	£34,861,000	£3,378,000	£6,514,000	£44,753,000

The means adopted by the empire to raise this amount are the following:—

1. *Revenue arising from the property of the state.*

(a) The empire reserved out of the French war indemnity several large sums which produce interest. If necessary, besides the interest, the principal itself is gradually applied to certain objects which have to be carried out by the state. The largest of these reserved capitals is the "Invalidenfond." At its foundation it was appropriated only to the payment of pensions to the invalids and the widows of the soldiers who fell in the French war. Afterwards some further payments for military pensions were assigned to it. The amount of the fund originally was £28,050,000; up to 30th June 1891 (according to the report of that date), £4,900,000 of this capital had been spent besides the interest; the amount remaining was therefore £23,150,000.

(b) The empire is the proprietor of the railways in Alsace-Lorraine (Elsass-Lothringen); their original purchase-money, together with the sum afterwards spent on them, was upwards of £25,000,000. The net revenue arising to the exchequer is estimated for 1893-94 at £1,037,500, and nearly as high for 1894-95.

(c) The empire takes the revenue arising from the post and telegraphs outside of Bavaria and Wurtemberg, which for 1894-95 is estimated at £989,000.

(d) The empire owns a printing-office which works both for the public and for private customers; the net revenue is estimated at £58,600, and for 1894-95, £68,300.

2. *Customs.* The whole territory of Germany is included in one customs-frontier with the exception of some inconsiderable parts of Baden, Prussia, and Hamburg; on the other hand Luxemburg, though not belonging to the confederation, is also within this same frontier.

But the customs revenue does not entirely fall to the empire. Since 1878, according to the Frankenstein-clause (so called after the name of the deputy who moved it in the Reichstag), the empire only takes yearly from the customs revenue, together with the duty on home-grown tobacco, £6,500,000, the whole surplus being distributed among the individual states. The total customs revenue for 1906 is estimated at £28,035,000, and for 1907 at £30,018,250.

3. *Excise.*

(a) The salt duty, being 6 marks on every cwt. of salt produced in the empire and destined for human consumption within the country, brings about £2,766,000

for 1907. The duty on foreign salt imported is naturally included in the customs revenue, and is between £100,000 and £150,000; hence the salt duty in Germany amounts to about 11d. per head of the population.

(b) The sugar duty is 18s. for every two cwts. of sugar produced and consumed within the country, the sugar reserved for export remaining duty free, and even receiving a bounty. This latter is now—for raw sugar 1s. 3d. for every two cwts., for candy 2s., for other refined sorts 1s. 8d. These bounties and the drawbacks on confectionery exported amount to £525,000. The estimated net revenue to the empire for 1894-95 after deduction of this sum is £3,770,000.

(c) Tobacco, if grown within the empire, is taxed at £2 : 5s. for every two cwts. of dried produce; the amount of the tax is estimated for 1894-95 at £554,000. But the exchequer of the empire does not receive this sum, because the internal tax on tobacco, as far as, together with the surplus of the customs duties, it is above £6,500,000 yearly, is distributed among the individual states. The revenue from imported tobacco, which is much larger than that derived from home-grown tobacco, is included in the customs revenues. It was in 1891-92 more than £2,150,000. Great alterations in the tobacco duty were contemplated (November 1893); and the tax on the raw produce of the country was to be abolished, the customs duty reduced, and the product ready for consumption taxed at the manufacturer's, but this scheme has been dropped for the present.

(d) The beer duty is raised as a federal duty in the northern part of the empire only; whilst in Bavaria, Wurtemberg, Baden, and Elsass-Lothringen the beer taxes are a revenue of the individual state, levied according to its separate legislation. The federal duty is laid on the malt, or the substitutes for malt, when brought

to the brewery; it is 4s. for two cwts. on all descriptions of grain, and for substitutes in proportion. The beer coming from the southern states to those in which the empire receives the tax on production has to pay an import-duty to the empire. The beer duty and this internal import-duty are estimated, in the revenue of the empire for 1894-95, at £1,243,000.

(e) The duty on spirits has been levied since 1st October 1887, throughout the whole empire. It consists of two parts—of a tax on the production of spirits, and of a tax on consumption. For the purposes of the tax on production three classes of distilleries are distinguished: 1st, such as employ grain as material, and are at the same time part of agricultural undertakings (called agricultural distilleries); 2nd, such as employ sugar or sacchariferous materials; 3rd, such as employ grain but are not altogether part of agricultural undertakings (called industrial distilleries). The tax on the production of the first class of works is levied on the space which the mash fills in the fermenting vats; it is 1s. 4d. for every hectoliter of the contents of the tub. In the second class, if sugar or similar substances—*e.g.* fruits—form the materials, the substances employed are to be taxed according to their weight and kind. The industrial distilleries, finally, pay an addition of £1 per hectoliter on the tax on consumption. The smaller establishments among all the classes are allowed some reduction on the normal rate of the duties. The amount of the duty on consumption is fixed in the following manner. For a quantity of $4\frac{1}{2}$ liter per head of the population in northern Germany, and of 3 liter per head of the population in the south, the tax on consumption is 6d. the liter; for any excess in the consumption of the country the duty is 8½d. the liter. The total quantity allowed to be produced at the lower rate is allotted to the individual distilleries according to their size.

Of these different duties on spirits only the tax on production remains to the empire. The tax on consumption and the tax on the ready-made produce in the industrial distilleries are distributed to the individual states according to the number of their inhabitants. For 1894-95 the taxes on spirits remaining to the empire were estimated at £899,000, those to be distributed among the states at £5,005,000.

4. Stamp duties.

(a) A tax on bills of exchange of 6d. for every £50 drawn; but amounts below £50 are taxed somewhat lower. The revenue is estimated for 1894-95 at £279,000.

(b) A tax on playing-cards, estimated for 1894-95 at £62,800.

(c) Taxes on—1st, the issue of stock exchange securities; 2nd, on every sale of such securities. The former duty is estimated for 1894-95 at £221,000, the latter at £552,000. These sums

are to be distributed among the individual states. An act passed in 1894 imposes a higher *ad valorem* scale.

(d) A tax on public and private lotteries, producing in 1894-95 £452,000. This tax also does not accrue to the empire, but is divided among the states according to their population.

(e) A statistical duty on the goods exported and imported, levied with the receipt of the declarations relating to the quantities, the origin, and destination of the goods. It produces for 1894-95 £34,000.

5. Share of profits from the imperial bank, and tax from other banks of issue, amounting, according to the estimate for 1894-95, to £362,000, and for 1907, £1,130,750.

6. *Contributions by the Individual States.* There can never be a deficit in the imperial budget because any excess of expenditure over the imperial taxes is covered by these contributions which are called matricular contributions, and are distributed among the states in proportion to their respective populations, additional contributions being imposed on those states which have a separate postal administration, and also on those in which no federal beer duty is levied. The total amount of these contributions, as fixed for 1894-1895, is £19,875,000, but this sum is of course subject to a deduction of £17,772,000, being the amount of the above-mentioned duties and taxes collected by or on behalf of the empire for the benefit of the individual states. The matricular contributions form an element of uncertainty in the state budgets, and a bill has in consequence been brought forward by the imperial government providing that the amount of matricular contributions shall in future be at least £2,000,000 below the amount of taxes and duties collected for the individual states, and that any deficiency thus caused must be covered by imperial taxation. It is very doubtful whether this proposal will be carried through.

For the fiscal year 1894-1895 the following revenue of the empire has been voted:—

Revenue—Empire of Germany.

Item of Revenue.	Amount.
Balance from last year	£69,000
Revenue from State property (not including revenue from Invalid Fund, and deducting extraordinary expenses incurred in respect of Postal Department)	2,207,000
Customs	17,485,000
Excise	18,612,000
Stamps	1,702,000
Revenue from Imperial Bank, etc.	362,000
Sale of land	70,000
Miscellaneous Revenue	629,000
Matricular Contributions	£19,875,000
Less amounts payable to individual States	17,772,000
	2,108,000
Revenue raised by loans and from special funds	38,239,000
	6,514,000
	£44,758,000

II. The expenditure of the individual states for their own purposes is about equal to the expenditure of the empire for federal purposes. Thus the Prussian expenditure for 1894-1895—as shown below (after deduction of the amount required for the service of the public debt which must be set off against the revenue from state property) amounted to about £22,000,000 (= 50 per cent of the expenditure of the empire), the Prussian population representing about 60 per cent of the whole population of Germany, and similarly Bavaria (having a population of about 11 per cent, of the whole German population) spends a yearly sum amounting (after deduction of the interest on the railway debt, which is about equal to the income from the railways) to £5,100,000 (= 11½ per cent of the imperial expenditure).

Prussian Expenditure, 1894-95.

Civil List Recurring Expenditure . . .	£786,000
Houses of Parliament . . .	69,000
Chief Government Department and Audit Department . . .	130,000
Foreign Affairs . . .	26,000
Financial Administration, Inland Revenue Department, and Provincial Government . . .	3,509,000
Public Works, etc. . .	1,034,000
Trade Department (including subventions to technical education and technical industry) . . .	281,000
Administration of Justice (after deduction of Court fees) . . .	1,550,000
Home Department (including Local Government Expenditure, Prisons, and Police) . . .	2,099,000
Agricultural Department . . .	669,000
Education: (Elementary and Higher as well as University) and Public Worship . . .	5,138,000
Pensions and Miscellaneous . . .	3,841,000
Service of Public Debt . . .	14,101,000
Exceptional Expenditure . . .	2,893,000
	36,076,000
Contribution to Empire . . .	12,399,000
	£48,475,000

Prussian Revenue, 1894-95.

Government Lands and Forests . . .	£2,686,000
„ Mines and Smelting Works . . .	814,000
„ Railways . . .	18,372,000
„ Lottery . . .	488,000
„ Bank (Seehandlung) . . .	94,000
Taxes—	
Direct . . .	£8,827,000
Indirect . . .	1,982,000
	10,809,000
Miscellaneous Revenue (including Return of Taxes collected by Empire) . . .	11,752,000
To be raised by the issue of a Loan . . .	3,510,000
	£48,475,000

“The indirect taxes in the German states which do not levy a state duty on beer are of no great importance. A wine duty exists in some of the southern states, and in Saxony and Baden a duty on meat. As to the direct taxes they are of two kinds: taxes on property or income levied at the source (objective taxes), and personal income-tax. In the southern states, especially in Bavaria and Wurtemberg,

objective taxation prevails, whilst in the northern states, as Prussia, Saxony, the personal income tax is of greater importance. Baden and Hesse are between these extremes.

A complete system of objective taxes comprises: (1) a land tax; (2) a house tax; (3) a tax on trades; (4) a tax on income from stocks and shares; (5) a tax on wages and salaries. All these five taxes are to be found in Bavaria and Wurtemberg; the tax on wages and salaries is not levied in Baden and Hesse; while Saxony has only a so-called land tax; Prussia has the three first named objective taxes, but they have been repealed as from the 1st April 1895. In Bavaria, of the direct taxes for 1892 or 1893, the land tax is estimated as £575,000, the house tax £262,500, the tax on trades £325,000, the tax on loans £208,380, that on wages and salaries £100,000. In Prussia up to this date the land tax produces about £2,000,000, the house tax £1,825,000, the tax on trades £1,125,000.

The income-tax in Prussia has lately been rearranged by the law of 24th June 1891. Incomes under £45 are free. The rate on small incomes is below 1 per cent; for incomes of £150, 2 per cent; for incomes of £400, about 3 per cent; and incomes of £5000 and above pay 4 per cent. The produce of the tax is about £6,250,000. In Saxony £15 is the limit of exemption and the rate does not rise higher than 3 per cent. The produce of the tax for 1893 is estimated at £962,500. In Baden the income-tax has been during recent years 2 per cent on the estimated income. But an abatement is allowed for smaller incomes, only those of £1500 and upwards paying the full tax. The produce of the tax thus assessed was about £200,000. In 1894 the percentage to be levied from the higher incomes has been increased.

A new personal tax, viz. a tax of 1/4th per cent of the capital value of each taxpayer's real and personal property has been introduced in Prussia as from the 1st April 1895; its produce is estimated at £1,750,000. Persons of small means are exempt, and real property situate outside of Prussia is not included in the assessment.

III. Of great importance also is the local finance. In Prussia the parish rates in 1884 were £8,600,000, and the district rates £1,150,000. Among the expenses of the parishes the most considerable are those for the poor, for the roads and for education. In Prussia, 1883-84, out of a total of £18,550,000 the expenditure on roads was £2,500,000 (13 per cent), for the poor £2,450,000 (13 per cent), for education £4,250,000 (23 per cent). Part of these expenses is covered by revenue from property and by profitable undertakings, as gas and water works. In Baden the net value of the property of the parishes was estimated, 1st January 1887,

at £15,500,000. In Prussia in the rural districts the parishes cover 20 per cent of their expenses in this way, in the towns 11·6 per cent. The taxation is chiefly a direct one, consisting of an addition to the taxes assessed and levied by the state for its purposes. In the towns of the southern states indirect taxes of some importance exist, such as additions to the state taxes on consumption—the wine, beer, meat duties—and an octroi duty on various necessities and conveniences brought to the town—coal, flour, meat, fish, etc. In Bavaria, 1878, the direct local taxes were £850,000, the indirect taxes in the twelve largest towns £250,000. In Baden, 1888, the direct taxes of the communes not considered as towns were £466,666, those of the towns nearly £175,000, together £637,500, the indirect taxes in the towns only £450,000 to £500,000. In Prussia the towns raised in 1883-84 local taxes per head of the population 12s. 4d., the rural districts 5s. 10d.; in Baden the towns, 16s. 9d., the rural districts, 7s. In Baden in 1889 the direct local taxes add on average 50 per cent to the corresponding state taxes.

The above states the position of matters in 1895. In 1904-5 the estimated revenue of the empire was £101,624,000, while the expenditure was £100,093,000. The customs revenue was £25,543,000 and the excise duties £16,637,000, while the expenditure on behalf of the army and navy was £32,335,000 and £11,428,000 respectively. The public debt was £146,812,000.

[Gustav Cohn, *System der Finanzwissenschaft*, Stuttgart, 1889, bk. iii. pp. 532-669.—Schönberg, *Handbuch der politischen Oekonomie*, vol. iii., Tübingen, 1891.—Laband, *Staatsrecht des deutschen Reichs*, Freiburg, 1888-91, vol. i. 379 seq., ii. 42 seq., 839-1037.—G. Meyer, *Lehrbuch des deutschen Staatsrechts*, Leipzig, 1885, p. 616-632.—v. Mayr, art. "Reichsfinanzen" in *Handwörterbuch der Staatswissenschaften*, vol. v., Jena, 1893, pp. 384-403.—Rönne, *Staatsrecht der preussischen Monarchie*, vol. i., Leipzig, 1881, p. 590 seq.; iv., Leipzig, 1884, p. 737 seq.—Stöcker von Neuforn, *Handbuch der gesamten Finanzverwaltung im Königreich Bayern*, 3rd ed. by T. Hock, 3 vols., Bamberg, 1881-1885.—Riecke, *Der württembergische Staatshaushalt, in Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft*, vol. vii., Leipzig, 1883, p. 193-230.—Philippovich, *Der badische Finanzhaushalt in den Jahren 1868-1889*, Freiburg, 1889.—Zeller, *Handbuch der Verfassung und Verwaltung im Grossherzogthum Hessen*, Darmstadt, 1885-86, i. 78-118, ii. 343-422.—Löbe, *Der Staatshaushalt des Königreichs Sachsen*, Leipzig, 1889.—Eheberg, art. Gemeindefinanzen in *Handwörterbuch der Staatswissenschaften*, vol. iii., Jena, 1892, pp. 760-785.—Schanz, *Finanz-Archiv*, Stuttgart, appearing since 1884.] E. L.

THE NETHERLANDS. (Amounts converted at 12 guilders = £1.) The finances of the Netherlands are in a sound condition. Whilst fifty-five years ago, in 1850, with a population of barely 3,000,000 and a budget of about

£6,000,000 sterling, the capital of the national debt amounted to over £100,000,000 sterling with an annual interest-charge of £3,000,000; nowadays, with a population of about 5,600,000 and a budget of more than double the amount of 1850, the capital of the national debt is only £94,900,000 with about £3,049,000 annual interest-charge. The exact figures of the national debt are—

	Nominal Capital.	Annual Interest.
1850	£102,637,700	£3,020,155
1907	£94,956,304	£3,049,016

From 1850 until 1905 inclusive, a total amount of £27,416,651 has been expended on amortisation of debt. In some years, however, the debt has increased again, namely, up to 1892, by a total amount of £16,145,600. But against this increase of debt stands expenditure on remunerative public works for an amount vastly superior. Up to 1902 the total expenditure on the railroads alone amounted to £29,805,000.

Again, whilst formerly the East India colony, namely Java, contributed a rather important amount to the revenue of the Netherlands, since 1877 this contribution has ceased entirely. From 1850-1877 these contributions amounted in all to £48,975,600. It was, in fact, these contributions which, from 1850 until the middle of 1870, enabled the government to amortise the debt for such an important amount (it may be useful to add that for a large amount the debt had been contracted previously in behalf of the colonies also) devoting at the same time very large sums to public works.

At first, when these colonial contributions to the revenue of the Netherlands had to be given up this caused some embarrassment, the more so as about the same time there was a considerable increase in the expenditure principally for public schools. The consequence was that for some years after 1880 the expenditure was not entirely covered by the revenue. But within a few years, by raising new taxes and other measures, the situation was modified and there was an end to the deficits. The cessation of the colonial contribution arose partly from the increase of expenditure in Java to which the war with Atchin contributed, but most of all from a change in the colonial policy of the government, the colonies being nowadays governed only for their own benefit, no tribute whatever being exacted from them on behalf of the Netherlands; more than this, the expenditure made by the Netherlands indirectly on behalf of the colonies (part of the home-charges) is not even repaid from the revenue of the colonies.

The fiscal system, however, had for many years been in serious want of some reform. This was not undertaken until quite recently, namely under the late government—finance minister M. Pierson—which came into power

in 1891, but the government having again been turned out of power early in 1894, this reform was interrupted. Unfortunately the financial result of the property tax, levied since May 1893, has been somewhat disappointing. It was expected to bring in £716,666, but the proceeds were not higher than £566,666 the first year.

The revenue for 1894 was derived from the following sources :—

Direct taxes	Land tax	£981,450
	Personal tax	967,583
	Droit de patente (till 1st May 1894)	121,333
	Tax on incomes not arising from property (after 1st May 1894)	255,583
	Property tax	566,666
Indirect taxes	Excise	3,495,833
	Registration duties	370,833
	Succession duties	966,000
	Stamps, etc.	302,916
	Import duties	480,104
	Domains	194,583
	Post and telegraphs	744,416
	Railways	329,166
	Other items	912,176

Total £10,688,642

The land tax is levied on the ratable yearly value of land and houses; the state levies 6 per cent on the net rateable rent from land not built upon, and 5·2 per cent on the gross rateable rent from houses.

The personal tax, a tax on expenditure, is calculated principally on the letting value of the dwelling occupied, the value of the furniture, and the number of servants. There is a universal agreement that this tax needs revision.

Real property, besides being subject to the land tax, is also subject to the property tax. The object of this tax is to levy a percentage on the income from property, but the percentage is computed not on the income itself, but on the capital value of the property. The tax is slightly progressive. For every 1000 guilders (£83 : 6 : 8) above 10,000 (£833 : 6 : 8) the tax is 1·25 guilders, but if the property amounts to more than 200,000 guilders, (£16,666 : 13 : 4) 2 guilders per 1000 are paid on the surplus.

On 1st May 1894 the *droit de patente*, or tax on occupations, was replaced by a tax on business profits, and on all incomes from labour, assessed in such a manner that, in connection with the property tax, it will have the effect of a general income tax. This tax also is slightly progressive; for the incomes below 8200 guilders per annum, it is 2 per cent, for higher amounts 3·20 per cent on the surplus is added. The property tax being levied at the rate of $1\frac{1}{4}$ and 2 per mille on the capital, the tax on business profits is 36 per cent less than the tax on incomes derived from property only

—on the hypothesis adopted by the government that the income from property averages 4 per cent. Property up to 13,000 guilders (£1083 : 6 : 8) is free from property tax, and income up to 650 guilders (£54 : 3 : 4) from the tax on profits and wages.

The succession duties are not progressive; they differ according to the degree of relationship between the deceased and his successors. From parents to children the duty is 1·38 per cent; husband and wife pay the same amount, if they inherit one from the other, when there are descendants from their union; if parents inherit from their children, the duty is 4·14 per cent; between brothers and sisters, or between husband and wife, if there are no descendants, it is 5·52 per cent; between uncle and niece, or inversely, 8·28 per cent; and between all others 13·8 per cent. In so far as the property inherited consists of stock, bonds, stock-exchange securities and other interest-bearing securities, there is levied, besides the succession duties referred to, a special succession duty, varying from 0·345 to 2·76 per cent. The total amount of the succession duties rises in this way from 1·725 per cent in the first degree of relationship, to 16·56 per cent from distant relatives or strangers.

The excise on spirits is high, £5 : 5s. on every hectoliter (22 gallons); from spirits alone a revenue of £2,166,000 annually is raised. The fiscal law concerning the sugar duties until 1903 gave a bounty to the producers.

The Netherlands are a free-trade country, food and raw produce enter without duty, manufactured goods generally pay 5 per cent of the declared value. Measures were taken in 1895 for securing that the proper percentage is really paid.

The state-railroads are leased to private companies; the rents they pay form the greater portion of the receipts under this head. The miscellaneous receipts include various payments to the treasury which are distributed over the several departments: repayments, reimbursements, legal fees, etc.; and also (a) £62,500 payment by the Netherlands Bank for the right of issue of banknotes, which payment depends from the amount of the bank's profits of the year; (b) £154,500 reimbursement by the colonial treasury for interest on debt—£3,806,250—contracted in 1883 by the home government on behalf of the East Indian colonies.

The expenditure for 1894 is divided as in the following table :—

Civil list	£67,000
Parliament	55,625
Foreign affairs	65,410
Justice	452,681
Home Office	1,069,717

Carry forward . . £1,710,439

Brought forward	£1,710,433
Marine	1,301,761
National debt	2,910,719
Finances	1,595,904
War	1,856,560
"Waterstaat," commerce and industry	1,837,337
Colonies	113,434
Unforeseen	4,166

Total . £11,330,314

The item finances includes: (a) £714,288 payment by the government treasury to the municipal governments on account of the personal tax in virtue of an arrangement that was made in 1865 when the municipal excise-taxes were abolished; (b) £164,280 payments to the clergy of the Reformed, Roman Catholic, and Jewish churches by the state; (c) £125,671 pensions; and further, the expenditure of collecting revenue and the general expenditure of the department of the treasury and also of administration of debt.

The item Waterstaat includes the expenditure for post and telegraphs, amounting to £710,000; and the expenditure on embankments and other defence against the sea's encroachments, on canals and rivers, and also almost annually a certain amount of expenditure for remunerative public works.

It will be observed that the total of the expenditure for 1894 is

£11,330,314
Against total revenue 10,688,642

Leaving a deficit of £641,672

But the expenditure includes this year disbursements for remunerative public works for a total amount of £221,750, and besides it is calculated that the credits opened in the budget for general expenditure exceed regularly the real expenditure for an amount of, at least, £250,000. Deducting these two items, the deficit is reduced to about £180,000. This deficit is the consequence of the proceeds of the property tax not having been as high as it was expected they would be. Towards meeting this the then finance-minister proposed to modify the mode of levying the import-duties, which are said to be at least £150,000 short through frauds.

THE BUDGET FOR 1906.—*Revenue*.—Land tax, £1,147,000; personal tax, £829,166; property tax, £707,916; tax on other incomes, £636,666; excise, £4,506,666; import duties, £950,000; other indirect taxes, £2,011,791; post and telegraphs, £1,385,750; railways, £349,011; other items, £1,762,058—total, £14,286,024.

Expenditure.—Civil list, £82,500; parliament, £58,266; foreign affairs, £84,113; justice, £602,847; home office, £2,093,950; marine, £1,438,927; national debt, £3,058,284; finances, £1,944,112; war, £2,276,023; "waterstaat," £2,887,504; agriculture, in-

dustry, and commerce, £322,887; colonies, £289,269; unforeseen, £4166—total, £15,142,851. Deducting £559,871 extraordinary expenditure, a deficit of £296,956 remains.

[Annual Reports on Dutch finance in *Consular Series*.—Fiscal reform in Holland, in the *Economic Journal*, 1893; *Bescheiden betreffende de geldmiddelen*; *Statistiek der zijksintromsten*, 1905.—G. M. Boissevain, *Die neueste Steuer-reform in den Niederländer im Anschluss an die Finanzgeschichte des Landes seit der Verfassungs-revision im Jahre 1848*, Aus den "Finanzarchiv," herausg. von. G. Schanz.] H. B. G.

THE UNITED STATES. NATIONAL FINANCE.
(The \$ converted as 5 = £1 in this statement.)

I. REVENUE.—(a) *Import Duties*.—The main source of national revenue has always been from the customs. The first tariff of import duties was enacted immediately after the formation of the government under the present constitution in 1789. At first chiefly a revenue measure, with increasing rates to yield larger revenues, the tariff gradually became a system of avowed protection to American industry. The rates varied with the successive domination of political parties, but the yield increased steadily from decade to decade. At the outbreak of the civil war the rates were largely augmented, the largest revenue under the war rates being \$216,000,000 (£43,200,000) in 1872. The crisis of 1873 reduced the revenue to \$130,000,000 (£26,000,000) in 1877, and it was not until 1882 that the preceding greatest yield was reached and even slightly exceeded. Since the civil war there have been several changes, generally in the direction of higher protective duties, which diminished the revenue for several years at a time. The tariff of 1883 reduced the revenue from \$220,000,000 (£44,000,000) in 1882 to \$181,000,000 (£36,200,000) in 1885; the tariff of 1890 reduced the revenue from \$230,000,000 (£46,000,000) in 1890 to \$177,000,000 (£35,400,000) in 1892.

The highly protective M'Kinley Tariff (1890) increased duties on raw materials and articles manufactured in the United States, particularly on raw wool, goods manufactured of cotton, linen, and silk, on iron and steel manufactures, on barley, hemp, and flax. This act also instituted a bounty on sugar, the raw sugar duties having been repealed, and introduced the principle of commercial reciprocity, empowering the President to levy duties on certain raw materials imported from any country raising unfair duties against the United States. The Wilson Tariff (1894), intended to recast the protective system, only remained in force three years, being regarded by the Republican party on their return to power as causing the large annual deficit in the Treasury. The Dingley Tariff (1897), while the needs of the Treasury

were kept in view, was entirely protective. It revived the principle of reciprocity of 1890, together with many of the duties then imposed such as that on wool, while those on linen, cotton, woollen and silk manufactures, on certain iron and steel goods, and machinery, were increased. The duties on raw iron and steel remained unchanged. The duty on sugar was increased for revenue and for protective purposes. Bacon, cheese, butter, wheat, and rice are also taxed. The customs receipts for 1904 were \$261,274,564 (£52,254,918), being \$23,000,000 (£4,600,000) less than in 1903. This, though largely due to high returns in 1903, was partly accounted for by the abolition of the War Tax on tea, of the countervailing duty on sugar, and by the reciprocity treaty with Cuba, causing a loss to the revenue on sugar and tobacco.

(b) *Internal Revenue.*—Internal Revenue taxes were tried in the last decade of the 18th century, and again during the war with England of 1812. The present system is an outgrowth of the civil war. Most of the taxes then adopted were repealed before 1872, and many of the others reduced or repealed in 1883 and 1890; but to meet the expense of the Spanish War of 1898 new duties were levied, those on tobacco and fermented liquors, except spirits, being doubled. Stamp taxes were laid on cheques, drafts, and many business operations, on patent medicines, etc.; an excise duty was levied on refiners of sugar or petroleum; a legacy duty imposed; banks and brokers, and places of amusement taxed. The tax on national banks is not technically included in the internal revenue. There is also a tax on oleomargarine, and a prohibitory tax on opium manufactured in the United States. Recently large sums have been paid by the treasury for redemption of stamps and refunding of taxes.

The maximum yield of the internal revenue in 1866, when it included an immense complex of all imaginable taxes, was \$309,000,000 (£61,300,000). Reductions in 1872 and earlier decreased the revenue in 1874 to \$102,000,000 (£20,400,000). The reductions of 1883 diminished the revenue from \$146,000,000 (£29,200,000) in 1882 to \$112,000,000 (£22,400,000) in 1886; notwithstanding the reductions of 1890 the revenue increased from \$140,000,000 (£28,000,000) in 1890 to \$154,000,000 (£30,800,000) in 1892. The additions in 1898 caused a rise from \$171,000,000 (£34,200,000) in 1898 to \$273,000,000 (£54,600,000) in 1899, and \$307,000,000 (£61,400,000) in 1901.

The income from internal revenue during 1904 was \$233,000,000 (£46,600,000), divided as follows:—

Distilled spirits	\$135,810,015	£27,162,003
Fermented liquors	49,083,458	9,816,691
Tobacco	44,655,808	8,931,161

Oleomargarine	\$484,097	£96,819
Miscellaneous	2,870,623	574,124

The cost of collection was 1·94 per cent.

(c) *Other Sources of Revenue.*—The customs and internal revenue form the great bulk of the entire receipts of the national government, amounting in 1904 to \$494,178,684 (£98,835,737) out of \$684,214,373 (£136,842,375). The proportion is even larger than it appears, because the postal service, which is almost self sustaining, is counted on both sides of the balance sheet, the receipts and expenditures for the post office being \$143,582,624 (£28,716,525). The policy of the national government is to reduce postal rates rather than to make profits. In 1904 the deficiency in postal revenues was \$6,502,530 (£1,300,506). Moreover, the budget of the district of Columbia, in which the city of Washington lies, is included in the federal budget. The receipts from this alone in 1904 amounted to almost \$5,454,344 (£1,090,869).

The remaining \$40,998,722 (£8,199,744) of revenue were derived from sales of public lands, fees, profits of coinage, sinking fund for Pacific railways, tax on national banks, and a number of minor miscellaneous sources. The profits on coinage were very much swollen between 1878 and 1891, owing to the difference between the market price and the mint price of the silver dollars issued under the Bland bill, amounting in some years to 25 or 30 per cent of the entire amount coined. Under the Bland bill 378,166,793 silver dollars were coined between 1878 and 1891, on which the seignorage, or profit, to the government was \$71,952,392 (£14,390,478). This profit is now unimportant. During the sixties the government loaned the Central and Union Pacific Railway Companies about \$64,000,000 (£12,800,000). The law of 1878 provided for a sinking fund and gradual repayment of the debt. During 1904 the revenues from this source were \$7,481,624 (£1,496,325). The tax on national banks is $\frac{3}{4}$ of 1 per cent on the circulation. The *immigrant fund* is composed of a small tax on each immigrant since 1882; and the tax on seal skins is paid by the corporation to which the Alaska seal fisheries are farmed out. The Trust Funds (Department of State) provide a considerable sum, in 1904 \$1,791,741 (£358,348). Some items are temporary, as the repayment of the loan to the Louisiana Purchase Exposition Company and the Spanish Indemnity.

II. EXPENDITURE.—The striking features in the national expenditure during recent years have been the increased naval and military outlay, the growth of the pension list, and the decrease of the interest charge for the public debt. From the end of the civil war to 1880 the *pensions* to survivors or their families varied annually from twenty

to thirty-five million dollars (£4,000,000 to £7,000,000). In 1880 the classes were enlarged and the pensions jumped to \$56,000,000 (£11,200,000). For the next eight years they varied from fifty to seventy millions of dollars, (£10,000,000 to £14,000,000). In 1889 the old law was more liberally construed, in 1890

a new "dependent pension" law was enacted, and the pensions increased from \$88,000,000 (£17,600,000) in 1889 to \$107,000,000 (£21,400,000) in 1890, and to \$159,000,000 (£31,800,000) in 1893. For 1904 they were \$142,500,000 (£28,500,000). During the years 1898-1901, comprising the Spanish War, the

REVENUE FOR 1904.

From customs	\$261,274,564	£52,254,913
From internal revenue	232,904,119	46,580,824
From sales on public lands	7,453,479	1,490,096
From profits on coinage, bullion deposits, &c.	6,373,396	1,254,679
From revenues of the District of Columbia	5,454,344	1,090,869
From fees—consular, letters patent, and lands	4,202,730	840,546
From sales of Indian lands, proceeds of Indian labour, &c.	3,112,720	622,544
From navy pension, navy hospital funds, &c.	2,370,073	474,015
From tax on circulation of national banks	1,836,639	367,328
From payment of interest by Pacific railways	1,782,469	356,494
From trust funds, Department of State	1,791,741	358,348
From immigrant fund	1,662,835	332,567
From customs and navigation fees, fines, penalties, &c.	881,572	166,814
From Soldiers' Home, permanent fund	687,653	137,531
From sales of government property	547,774	109,555
From judicial fees, fines, penalties, &c.	407,252	81,450
From sale of lands, buildings, &c.	252,549	50,510
From deposits for surveying public lands	203,757	41,151
From tax on sealskins	197,261	39,452
From reimbursement of loan to Louisiana Purchase Exposition Company	195,037	39,011
From licence fees, territory of Alaska	168,975	33,795
From sales of ordnance material	129,843	25,969
From depredations on public lands	101,123	20,225
From Spanish indemnity	57,000	11,400
From part payment Central Pacific railroad indebtedness	5,009,156	1,132,381
From miscellaneous sources	731,654	146,331
From post revenues	143,582,024	28,716,525
Total receipts.	\$684,214,373	£136,842,874

The expenditure for 1904 was—

For the civil establishment, including foreign intercourse, public buildings, Panama Canal, collecting the revenues, district of Columbia, and other miscellaneous expenses	\$186,766,702	£37,353,340
For the military establishment, including rivers and harbours, forts, arsenals, sea-coast defences, and expenses of war with Spain and in the Philippines	115,035,410	23,007,082
For the naval establishment, including construction of new vessels, machinery, armament, equipment, improvement at navy-yards, and expenses of war with Spain and in the Philippines	102,956,101	20,591,220
For Indian service	10,438,350	2,087,670
For pensions	142,559,266	28,511,853
For interest on the public debt	24,646,490	4,929,298
For postal service	143,582,625	28,716,525
Total expenditure	\$725,984,945	£145,196,939
Showing a deficit of	\$41,770,572	£8,354,115

restoration of peace in the Philippines, and the campaign in China, 1900, military and naval expenses increased enormously, the former rising from \$49,000,000 (£9,800,000) in 1897 to \$230,000,000 (£46,000,000) in 1899, and the latter from \$34,500,000 (£6,900,000) in 1897 to \$64,000,000 (£12,800,000) in 1899. For 1898-1901 a total of \$603,000,000 (£120,600,000) was expended on the army, and \$238,000,000 (£47,600,000) on the navy. A result of the war will be to make expenditure for the army and navy permanently larger, and pensions also are likely to increase. For 1902-1904 the army cost \$346,000,000 (£69,200,000), and the navy \$253,000,000 (£50,600,000). On the other hand, the interest charge on the public debt has greatly diminished, in 1867 it was \$143,781,592 (£28,756,318), and in 1904, \$24,600,000 (£4,920,000).

The figures of receipts and expenditures for the fiscal year, 1904, are given.

III. THE DEBT.—The total funded debt at the close of the civil war amounted to \$1,109,568,191 (£221,913,638). In addition there was a large unfunded debt, funded during the next few years, which brought the total debt to a sum exceeding \$2,800,000,000 (£560,000,000). The great refunding acts were those of 1870, 1881, and 1900. In 1870 the interest bearing debt consisted almost entirely of \$1,934,696,750 (£386,939,350) 5 per cent and 6 per cent bonds. Under the act of 1881, all the 6 per cent bonds were redeemed by 1903 (except \$26,466,000 (£5,293,000) Pacific railway bonds which are still outstanding); the 5 per cents were converted into 3½ per cents, then into 3 per cents, and finally redeemed in 1887; the 4½ per cents were re-

deemed in 1891, but \$25,364,500 (£5,072,900) continued at 2 per cent till 1900; the 3 per cent navy pension bonds were redeemed in 1891. By the act of 1900 the 3 per cents of 1908 (Spanish War loan), the 4 per cents due in 1907, and the 5 per cents due in 1904, a total of \$839,000,000 (£167,800,000), were refunded into new thirty-year 2 per cent gold bonds. The present interest bearing debt (September 1904) is as follows:—

2 per cent bonds, Redeemable 1930	\$542,909,950	£108,581,990
3 per cent bonds, Redeemable 1908	77,185,360	15,427,072
4 per cent bonds, Redeemable 1907	156,593,650	31,318,730
Refunding Certificates, 4 per cent	28,770	5,754
4 per cent bonds, Redeemable 1925	118,489,900	23,697,980
	<u>\$895,157,680</u>	<u>£179,031,526</u>

The debt on which interest has ceased since maturity is \$1,662,220 (£332,444).

THE UNFUNDED DEBT.—The debt bearing no interest is—

United States notes	\$346,681,016	£69,336,203
Old Demand notes	53,847	10,769
National Bank notes, Redemption Account	33,373,135	6,674,627
Fractional Currency (nominally outstanding)	6,869,250	1,373,850
	<u>\$386,977,248</u>	<u>£77,395,449</u>

In addition to this the outstanding certificates and notes, issued on deposits of coin and purchases of silver, are—

Gold Certificates (acts of 1863 and 1882)	\$528,491,960	£105,698,394
Silver Certificates (act of 1878)	474,322,000	94,864,400
Treasury notes (act of 1890)	11,966,000	2,393,200
	<u>\$1,014,779,960</u>	<u>£202,955,994</u>

The aggregate debt is thus: \$2,298,577,068 (£459,715,413); against which the treasury holds in cash (money and bullion) \$1,218,071,759 (£243,614,351); making a net debt of \$1,080,505,309 (£216,101,061).

STATE AND LOCAL FINANCE.

(a) *Debts*.—In addition to the national debt there are three kinds of debt: state, county, and municipal debts. The *state debts* arose chiefly in the period 1830-1840, and were contracted for public works. During the past two decades the commonwealths have been diminishing their debts very quickly, and a considerable number are now entirely out of debt. Some still have a nominal debt, consisting of their own state bonds invested in so-called trust funds, the interest of which is devoted to education and other purposes. These states also are virtually out of debt. The few debts of any importance which still exist are found in the southern states, as a result of the civil war and reconstruction period. In 1890, the debt of the states and territories, over and above all re-

sources, was \$132,336,689 (£26,467,338) against \$204,500,674 (£40,900,135) in 1880. The debt, less sinking fund alone, in 1890 was \$223,107,883 (£44,621,576), of which \$150,194,322 (£30,038,864) was owed by the southern states.

The *county debt* has somewhat increased, owing chiefly to the number of new counties. The county gross debt in 1890 was \$145,693,840 (£29,138,768) as against \$125,621,455 (£25,124,291) in 1880. The county net debt in 1890 was \$115,224,885 (£23,044,977).

The *municipal debt* has also increased. But extravagant increase has been rendered impossible by the provisions in most of the state constitutions which limit local debts to a certain percentage—varying from 5 to 15 per cent—of the assessed valuation property. The debts can thus never increase faster than the wealth of the country. The gross municipal debt in 1903 was \$1,425,841,585 (£285,168,317) as against \$745,949,786 (£149,189,957) in 1890, and \$695,494,741 (£139,098,948) in 1880. The sinking fund increased from \$115,158,742 (£23,031,748) in 1880 to \$147,181,191 (£29,436,238) in 1890, and to \$291,396,061 (£58,279,212) in 1903. The net debt was \$633,427,824 (£126,685,565) larger in 1903 than in 1880. The annual interest charge on combined state and local funded debts in 1890 was \$65,541,776 (£13,108,355) or 5·29 per cent, as against \$68,935,807 (£13,787,161), or 6·17 per cent in 1880.

(b) *Revenue and Expenditure*.—Owing to the separation of governmental functions, the expenses of the states are far less than those of the municipalities or the national government. The state expenses are mainly for education, charity, salaries of state officers, and militia. In the southern states we must add pensions, and in a few states expenses for public works. In the cities the expenses are far greater. The six largest states spent in 1890 \$28,859,010 (£5,771,802). New York city alone spent \$244,000,000 (£48,800,000) in city government in 1903. In 1902 the 175 largest cities, containing more than three-fourths of the urban population, paid \$683,000,000 (£136,000,000) for ordinary expenses.

The state and local revenues are derived chiefly from taxation. Some of the states, as Texas, obtain a slight revenue from land sales. Many municipalities own their water works, and a few own gas and electric light works; but, except in one or two cities, no attempt is made to derive net revenues therefrom.

The system of taxation is based almost everywhere on the general property tax. In the southern states, and to a less extent in three or four northern and western states, we also find a comprehensive system of "license" or "privilege taxes" on most occupations. Income and stamp taxes are found in a few cases,

but the receipts are everywhere insignificant except in Pennsylvania, where the stamp taxes yield a fair revenue. Collateral inheritance taxes are found in a few of the eastern states, and a direct succession tax exists in New York. Special and general taxes on private corporations abound.

While the great tax is the general property tax, personal property has to a great extent slipped out of the assessment lists, and the tax falls principally on real estate. Thus in New York state personalty pays less than 10 per cent, and realty more than 90 per cent. The system, moreover, is greatly confused by the lack of uniformity in the different state tax laws. In some states debts are exempted, in others not; in some states mortgages are exempted, in others not. Real estate is generally taxed where it is situated; but personalty is taxed sometimes where it is situated, sometimes where the owner resides, sometimes in both places, and often in neither place. During recent years the difficulty of reaching personalty has led to a variety of new plans. These are as follows:—

1. *To enforce the personal property tax by more vigorous measures.* The so-called *listing system* requires every tax-payer to make a complete list of every article of his personalty under oath. This plan is much favoured by the farmers and has been introduced in several states. But it has not been very successful.

2. *To reach intangible personalty by a system of registration.* This has been adopted by Connecticut. Any one owning securities may have them registered in the treasurer's office, and by paying the "investment tax" will then be exempt from other taxation on the securities. This has been fairly successful; but is, of course, only a partial solution.

3. *To reach mortgages by declaring them to be realty, not personalty, for purposes of taxation.* This plan has been adopted in California, Oregon, Massachusetts, and Michigan. In these states mortgages do not follow the person of the holder according to the rule, *mobilia personam sequuntur*, but are taxable where the land is situate. The landowner is taxed on the value of the land less the mortgage; the owner of the mortgage is taxed on the value of the mortgage.

4. *To abolish the personal property tax and put the whole weight on real estate.* This plan is favoured chiefly by the followers of Henry George, who desires all taxes to be put on land values. It was tried in Hyattsville, Maryland, but was pronounced unconstitutional.

5. *To abolish the personal property tax, and to substitute for it the income tax.* This is a plan favoured by a few writers and officials. But the income taxes already existing, as in Massachusetts, Virginia, etc., are mere farces, and there is no likelihood of their being extended.

6. *To abolish the personal property tax and to replace it by state taxation of corporations and inheritances, leaving the real estate tax to the local divisions.* To this plan many of the states are gravitating. The general tax on corporations has been most fully developed in Pennsylvania and New York, but exists in whole or in part in many other states. Collateral inheritance taxes are found in several states, and the direct tax on successions to personalty has recently been introduced in New York. No satisfactory solution of the tax problems can be expected until joint measures are adopted by the commonwealths to regulate inter-state relations, and thus avoid double taxation. For most of the difficulties are referable to this source.

To state the entire burden of taxation resting on the American people is difficult. It depends on whether we include the fees from postal service, waterworks, licences, etc., among taxes. They certainly represent a charge upon the people. The figures of the twelfth census for the total ordinary receipts of the states and local divisions are published; and the work of the Census Bureau, established by the act of March 3, 1899, gives further information. According to a recent census bulletin the ordinary receipts of 175 principal cities in 1903 were \$345,000,000 (£69,000,000). It may be assumed that the total city and town receipts in the United States in 1903 amounted to \$430,000,000 (£86,000,000). The receipts of the federal government were \$684,000,000 (£137,000,000). The commonwealth and county ordinary receipts were probably between \$170,000,000 (£34,000,000) and \$220,000,000 (£44,000,000). The total may be about \$1,500,000,000 (£300,000,000), roughly representing the annual burden resting on the people.

The incidence of these charges is likewise difficult to determine. The bulk of the federal taxation would, however, rest on the consumer; while the bulk of the local and state taxation would rest on the owners of real estate. Local taxation consists largely of the tax on personalty and license taxes. For these points, with especial reference to American conditions, see Seligman, *The Shifting and Incidence of Taxation* (1892).

[Annual reports of secretary of the treasury, Washington. Annual and biennial reports of state treasurers, auditors, comptrollers, and city comptrollers. Publications of the Bureau of the Census Department of Commerce and Labour, Washington. Seligman, *Finance Statistics of the American Commonwealth* (1889).—Dewey, *Finance History of the United States* (1903).—Ely, *Taxation in American States and Cities* (1887).—Seligman, "The General Property Tax," and "The Taxation of Corporations," in *Political Science Quarterly*, vol. v. (also separately).—Adams, *Public Debts* (1888). Rosewater, *Special*

Assessments (Columbia College Studies in History, Economics, and Public Law, vol. ii., No. 3, 1893).

Among the reports of special commissioners on taxation may be mentioned those of New York (First and Second Reports, 1871-1872), Massachusetts (1875), West Virginia (1884), Illinois (1886), Connecticut (1887), Maryland (1888), Pennsylvania (1889), Maine (1890), Boston (1889 and 1891), New York (1893).] E. R. A. S.

FINE. 1. A payment to be made by way of punishment for an offence.

2. A payment to be made to a feudal lord on the alienation of land,—such payments still occur in the case of copyhold lands or freehold lands held of a manor.

3. A proceeding which, similarly to the proceeding by RECOVERY (*q.v.*), was formerly used for the purpose of barring an entail (see FEE TAIL) The act for the abolition of fines and recoveries (1833), which enables tenants in tail to recover the entail by the execution and enrolment of a disentailing deed, has abolished this procedure. E. S.

FINENESS OF COINS. The amount of pure or "fine" metal contained in a coin is expressed either by means of the ancient "carat pound" system or by the more modern millesimal method.

The *carat pound system* consists in recording the alloy as being so much better or worse than standard, and is founded on an ideal unit, the carat pound, which is divided into 24 parts called carats. British standard gold contains 22 carats of gold and 2 carats of copper or other alloying metal in every 24 parts. The carat is further subdivided into 4 "carat grains," and the carat grain into 8 parts, the smallest division of the carat scale being thus $\frac{1}{32}$ th of a carat grain, or the $\frac{1}{256}$ th part of the carat pound. In order to attain a still greater degree of minuteness, the eighth part of a carat grain is further subdivided into $7\frac{1}{2}$ parts, or "excess grains." Each of these final divisions is thus the $\frac{1}{2048}$ th of the carat pound, and, as the troy pound also contains 5760 grains, each "excess grain" of gold beyond the last eighth in the assay report is reported as an "excess grain of gold in the troy pound."

Snelling, writing in 1766, says, in his *Doctrine of Gold and Silver Computations*, that, "by the word silver we understand not only the metal so called, pure and unmixed, but also when in a mass with copper; and if but one half, two-thirds, or any other proportional part of it be silver, yet the whole bears that name. The same is to be understood of gold, when by itself or in a mass with silver and copper together, or with either of them alone." . . . "This is the reason that inquiries are not made what quantity of fine gold or fine silver is contained in any mixture, which seems to be the most natural inquiry, but how much standard it holds." . . . "The assay master, in reporting

the result of an assay, does not give the absolute fineness or the quantity of fine silver or fine gold present, but only the relative quantity or fineness, that is, how much the mixture is more or less than standard. In the case of gold of 20 carats fine (20 parts of pure gold in 24 parts

of the alloy) the assayer puts down $W_o^{car.}$ ij., [which means *worse* (than 22) by 2 carats], and if it is 23 carats $3\frac{1}{2}$ grains fine, he puts down

$Br\ j. ij. ob.$ [which means *better* (than 22) by 1 carat $3\frac{1}{2}$ grains]. The sign *ob* represents an obolus or half a carat grain. In modern times, however, the final division has been $\frac{1}{10}$ of a carat grain. The carat pound system was in use at the royal mint till so recently as the year 1882, when the *millesimal method* of expressing the fineness of the precious metals was adopted. According to this system the metal is considered as being divided into 1000 parts, the proportion of fine to alloy metal being expressed in thousandths. Thus sterling standard gold, which was formerly referred to as containing 22 carats fine and 2 carats alloy, becomes "916·6 fine," and sterling standard silver is reported by the assayer as "925 fine."

Prior to the reign of Henry III. the only gold coins in use in England were pieces of pure metal known as byzants (coming originally from Byzantium), and florences (originally struck in Florence). The coins struck by Henry III. were also of pure gold. In the reign of Edward III. the standard was altered to 23 carats $3\frac{1}{2}$ grains fine and $\frac{1}{2}$ a grain of alloy. It was again reduced by Henry VIII. to 20 carats of gold and 4 of alloy. In his reign, however, crowns were coined of the standard of 22 carats of gold and 2 of alloy. This standard, known as "crown gold," was, in the reign of Charles II., finally adopted by act of parliament as the sole standard, and it has not since been altered.

The present standard of fineness for silver coins, 11 oz. 2 dwts. of silver and 18 dwts. of alloy (925 fine), was probably first introduced by the Saxons, but it has been subject to many changes. Henry VIII. greatly debased it, reducing it first to 10 ozs. silver and 2 ozs. alloy, and subsequently to 4 ozs. silver and 8 ozs. alloy. Edward VI. at first still further debased the silver coinage by reducing the silver to 3 ozs. only in the 12. Towards the end of this reign, however, the standard was slightly improved, and Elizabeth, in the second year of her reign, restored the fineness to its original standard, which has been maintained without alteration from that time to the present day.

The following list gives the fineness, expressed millesimally, of the standard coins of the principal countries of the world:—

(The coins which form the standard of value in France, Belgium, Italy, and Switzerland, will be found recorded under the head of the Latin Union.)

Country.	Gold Coins.	Silver Coins.	Fine- ness.
Argentine Re- public . . .	5 Pesos (dollars)	..	900
Austria-Hungary	Ducat ..	..	986½
	20-Crown piece	2 Florins	900
Brazil . . .	20 Milreis	..	917
British India .	Mohur ..	..	916-6
Bulgaria . . .	..	Rupce	916-6
Chile . . .	Condor (20 dollars)	5 Levs (frs.)	900
Colombia . . .	20 Pesos	..	916-6
Egypt . . .	Egyptian Pound	20 Piastres	875
Germany . . .	20 Marks	..	833-3
Great Britain .	Sovereign	..	900
Greece . . .	100 Drachmas	..	916-6
Holland . . .	Ducat ..	5 drachmas (frs.)	900
	10 Gulden	..	983
Japan . . .	20 Yen (dollars)	Rixdaler	900
"Latin" Union { France Italy Belgium Switzer- land	Italy (Lire) 20 Francs	..	945
	..	5 Francs	900
Mexico . . .	20 Pesos (dollars)	1 Peso (dollar)	900
Persia . . .	Thoman	..	902-7
Peru . . .	Libra (10 Sols)	..	900
Portugal . . .	Milreis	1 Sol (dollar)	916-6
Roumania . . .	20 Leis (frs.)	1000 Reis	900
Russia . . .	Imperial	5 Leis (frs.)	916-6
Scandinavia	20 Crowns	Rouble	900
Sweden	..	Crown	900
Norway	..	..	800
Denmark	..	..	..
Servia . . .	20 Dinars (frs.)	..	900
Spain . . .	100 Pesetas	5 Dinars (frs.)	900
Turkey . . .	500 Piastres	5 Pesetas (frs.)	900
United States .	Eagle	20 Piastres	916-6
Venezuela . . .	100 Bolivars	Dollar	830
Zanzibar . . .	5 Dollars	5 Bolivars	900
	..	Dollar	900

See ASSAY; MINT.

W. R. A.

FINESCHI, F. VINCENZO (18th century), a Dominican, was keeper of the records in the convent of S. Maria Novella at Florence, and wrote on early famines in that city.

Istoria compendiata di alcune antiche carestie e dovizie di grano occorse in Firenze, cavate da un Diario M.S. in cartapeccora del secolo XIV. Firenze, Pietro Gaetano Viviani, 1767. A. B.

FINLAISON, JOHN (1783-1860), born and educated in Scotland, a civil servant and statistician of ability almost amounting to genius. He studied for the Scotch bar, but gave up the law and was employed by the admiralty from 1805 to 1822. In this service he effected a great saving by the reform of the system of accounts, and invented a system of digesting and indexing the admiralty records and correspondence—which had been almost inaccessible for want of arrangement—so perfect that it still continues in use, and has been adopted by

several foreign governments. He also drew up an account of the French forces, 1811, the first navy list, 1814, and a register of all the officers in the navy, with their antecedents, for the use of the department. From 1822 to 1851 he was employed by the treasury as actuary and principal accountant of the check department of the national debt office, and his investigations into the subject of life annuities, which were being granted at a price much below their value, saved, it has been estimated, £3,000,000 to the country. In addition to the immense amount of labour entailed by his official work he was mainly instrumental in establishing pensions for widows and orphans in the civil departments of the navy, 1812 to 1819. His close study of the principles of life assurance, his most original work, carried on during these years, led to his help being sought in the formation of many friendly and assurance societies, which would not otherwise have been placed upon a sound footing. In connection with the compensation to slave-owners at the emancipation of slaves, 1833, he made computations of the duration of slave and creole life; in 1835 to 1837 he drew up reports for the ecclesiastical commissioners on church leases, church rates, and other similar subjects; and he was consulted on the system of registering births, marriages, and deaths established in 1837. From 1847 until his death he was president of the institute of actuaries; yet, in spite of such appreciation his incredible industry and invariable uprightness did not always save him from calumny and neglect.

Finlaison wrote a continuation of Sir R. Yorke's *Naval History* down to 1780.

[*Assurance Magazine*, April 1862, gives the fullest account.—Southwood Smith's *Philosophy of Health*.—Walford's *Insurance Cyclopædia*, vol. iii.—*Dictionary of National Biography*.—*Times*, 23rd April 1860.—For Finlaison's views on the organisation and management of insurance societies, see his *Evidence before the Select Committee on Assurance Associations*, 1853.]

E. G. P.

FIorentino, NICOLA, a Neapolitan, wrote (18th cent.) on the utility and importance of agriculture, and against protective duties, especially in an agricultural nation, where town industries ought not to be encouraged more than country ones, as foreign competition compels manufacturers to improve, and supplies the funds needed by agriculture.

Riflessioni sul Regno di Napoli, di Nicola Fiorentino, Napoli, presso de Bonis, 1794.

A. B.

FIRE INSURANCE. See INSURANCE.

FIRM. "Partners are called collectively a firm. . . . Commercial men and accountants are apt to look upon a firm . . . as a body distinct from the members composing it. Hence in keeping the partnership accounts the *firm* is made debtor to each partner for what he brings

into the common stock, and each partner is made debtor to the *firm* for all he takes out of the stock. . . . In taking partnership accounts and in administering partnership assets, courts have to some extent adopted the mercantile view, and actions may now be brought by or against partners in the name of their firms; but speaking generally the firm as such has no legal recognition. The law, ignoring the firm, looks to the partners composing it. Any change amongst them destroys the identity of the firm; what is called the property of the firm is their property; and what are called the debts and liabilities of the firm are their debts and their liabilities. In point of law a partner may be the debtor or the creditor of his co-partners, but he cannot be either debtor or creditor of the firm of which he is himself a member" (Lindley on *Partnership*, 7th ed. pp. 127, 128).

In addition to the difference between the mercantile and legal conception of a firm pointed out as above by Lord Lindley, there is a difference as to the use of the term between lawyers and traders which must be borne in mind. While to a lawyer the word "firm" is the collective designation of partners trading together (see *Partnership Act*, 1890, §4), laymen generally employ it for the purpose of describing the name under which a business is carried on, and which in legal language is called the "firm name" (*Partnership Act*, 1890, *ibid.*) Thus in ordinary language we may speak of the firm of a single trader while, according to legal terminology, there can be no firm, unless two persons at least are trading together. The word "firm" in Scotland and the German word *firma* is used in the sense of trade-name, both in legal and mercantile language ("the firm of a trader is the name under which he trades, and which he uses for his signature in the course of his business"—German Mercantile Code, § 17). The French word *raison sociale* only applies to partnerships; and in Italian there are two distinct words—*ditta*, which is the trade name of a person trading without any partners, and *ragione sociale*, which is used in the case of partnerships.

It would be a great convenience for bankers and traders generally if there were a public register of firms (in the sense of trade names) as in other countries, it being often most difficult to find out who carries on business under a given name—a circumstance which has frequently been taken advantage of for fraudulent purposes. A register of firms is more necessary in this country than on the continent (where it generally exists), because there is much greater freedom here than elsewhere in the choice of trade names, inasmuch as traders may at their option carry on business under their own names or under those of other persons, or under entirely fictitious names, subject to the one condition only that they do not interfere with any existing

right. The question as to the circumstances under which the use of a firm name is deemed an interference with existing rights is too complicated to be discussed in this place; the following recent cases throw light on the subject: *Levy v. Walker*, 10 Chancery Division, 436; *Gray v. Smith*, 43 Chancery Division, 203; *Thynne v. Shore*, 45 Chancery Division, 577) (see *PARTNERSHIP; STYLE OR TRADE NAME*). According to Scotch law a partnership forms a separate legal person like a corporation.

E. S.

FIRMIN, THOMAS (1632-1697), son of Henry Firmin and Prudence his wife, was born at Ipswich. He started business with a capital of £100, and twenty years later (1676) he is said to have been worth £9000. His philanthropic schemes are of some importance in the economic history of England for the light they throw upon the condition of the working classes at the end of the 17th century. After the Fire of London, Firmin built a warehouse for storing corn and coal, to be supplied to the poor at reasonable rates,—a scheme which recalls the practice of the city companies during the 15th and 16th centuries. His most important undertaking, however, was his "workhouse" which he built in Little Britain for the employment of the poor in the linen manufacture. The broad outlines of this scheme were suggested by a similar one which had been tried by B. GORGE in the parish of St. Sepulchre. Two years later (1678) Firmin unfolded his plans for dealing with poverty in his pamphlet, *Some Proposals for the employment of the Poor and for the prevention of Idleness and the consequence thereof, Begging, etc., in a letter to a Friend by T. F.*, London, 4to, 2nd edition, 1681, 8vo, reprinted in 1787 in a collection of pamphlets on the poor.

Firmin's proposals were (1) to set up in every parish a school "in the nature of a workhouse" in which the children of the poor should be taught spinning, weaving, silk-winding, stocking-knitting, etc.; (2) to provide home work of the same kind for poor women; (3) to erect workhouses for the reception of the aged poor; (4) in addition to the churchwardens, to appoint "fathers of the poor" in every parish to administer poor relief. In his own "workhouse" the children began work at 5 or 6 years of age. He found that they had to work 16 hours a day to earn 6d., and instead of recreation two hours were spent on their "education." Firmin was of opinion that "poor children that must be put out to poor trades, where they must work hard and fare hardly," should not be fed with white bread or taught farther than was necessary for such trades. He supplemented the miserable earnings of those employed in his workhouse, sometimes from 1600 to 1700 in number, with gifts of food and clothes. His scheme involved him in heavy losses. In 1690

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W. A. S. H.

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into the common stock, and each partner is made debtor to the *firm* for all he takes out of the stock. . . . In taking partnership accounts and in administering partnership assets, courts have to some extent adopted the mercantile view, and actions may now be brought by or against partners in the name of their firms; but speaking generally the firm as such has no legal recognition. The law, ignoring the firm, looks to the partners composing it. Any change amongst them destroys the identity of the firm; what is called the property of the firm is their property; and what are called the debts and liabilities of the firm are their debts and their liabilities. In point of law a partner may be the debtor or the creditor of his co-partners, but he cannot be either debtor or creditor of the firm of which he is himself a member" (Lindley on *Partnership*, 7th ed. pp. 127, 128).

In addition to the difference between the mercantile and legal conception of a firm pointed out as above by Lord Lindley, there is a difference as to the use of the term between lawyers and traders which must be borne in mind. While to a lawyer the word "firm" is the collective designation of partners trading together (see *Partnership Act*, 1890, § 4), laymen generally employ it for the purpose of describing the name under which a business is carried on, and which in legal language is called the "firm name" (*Partnership Act*, 1890, *ibid.*) Thus in ordinary language we may speak of the firm of a single trader while, according to legal terminology, there can be no firm, unless two persons at least are trading together. The word "firm" in Scotland and the German word *firma* is used in the sense of trade-name, both in legal and mercantile language ("the firm of a trader is the name under which he trades, and which he uses for his signature in the course of his business"—German Mercantile Code, § 17). The French word *raison sociale* only applies to partnerships; and in Italian there are two distinct words—*ditta*, which is the trade name of a person trading without any partners, and *ragione sociale*, which is used in the case of partnerships.

It would be a great convenience for bankers and traders generally if there were a public register of firms (in the sense of trade names) as in other countries, it being often most difficult to find out who carries on business under a given name—a circumstance which has frequently been taken advantage of for fraudulent purposes. A register of firms is more necessary in this country than on the continent (where it generally exists), because there is much greater freedom here than elsewhere in the choice of trade names, inasmuch as traders may at their option carry on business under their own names or under those of other persons, or under entirely fictitious names, subject to the one condition only that they do not interfere with any existing

right. The question as to the circumstances under which the use of a firm name is deemed an interference with existing rights is too complicated to be discussed in this place; the following recent cases throw light on the subject: *Levy v. Walker*, 10 Chancery Division, 436; *Gray v. Smith*, 43 Chancery Division, 208; *Thynne v. Shore*, 45 Chancery Division, 577) (see *PARTNERSHIP; STYLE OR TRADE NAME*). According to Scotch law a partnership forms a separate legal person like a corporation.

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one indictment in which was that Wolsey had "removed into Chancery indictments against his officers for taking 12d. in the pound for probatō of wills, and rebuking Mr. Justice Fitzherbert" (*Letters and Papers Hen. VIII.* iv. iii. 2713). Fitzherbert was among the judges who attended Anne Boleyn's coronation on 1st June 1533 (*ib.* vi. 263), and in July Cromwell addressed a letter to him concerning "the title of Antony Stydolfe, my ward," which he fears "may be prejudicial to me," and requires Fitzherbert "to stay the trial till he has further knowledge" (*ib.* vi. 380). In November of the same year he is mentioned as a member of the Council at Ludlow with a yearly fee of £10.

In June 1535 he sat on the tribunal by which Bishop Fisher and three Charterhouse monks were tried and convicted of high treason (*ib.* viii. p. 350), and in July took part in the trial of Sir Thomas More. Again on 13th May 1536 Sir Anthony was one of those who received a mandate to return all indictments found against Anne Boleyn and Lord Rocheford (*ib.* x. p. 361). He was written to about the Northern Rebellion, and was at Warrington in February 1537 for the trial of cases connected with it, while about the same time he took part in the business connected with the surrender of the monasteries of Whalley and Furness. His activity in the North was so great that he was "highly commended for his diligence" by Sussex, who wrote to Cromwell that "he cannot be spared from hence."—We hear of him next on the king's Council in Wales (*ib.* xii. ii. 321), but shortly after, while still in active service as a judge, he died 27th May 1538, and was buried at Norbury.

Fitzherbert married 1st, Dorothy, daughter of Sir Henry Willoughby of Woolaton, Notts.; 2nd, Matilda, daughter and co-heiress of Richard Cotton of Hempstall Ridware, Staffs., by whom he had five sons and five daughters, according to an epitaph preserved in the Le Neve collection (Harl. MSS. 3609). Although Fitzherbert did not enter into possession of the manor of Norbury until the death of his brother John in 1531, he certainly held land in the counties of Stafford, Warwick, Oxford and Northampton acquired by purchase and through his wife from 1503 onwards (unpublished family papers). From the notices scattered through the State Papers, Fitzherbert seems to have been a man of weight in practical matters, but he is best known to us as a legal writer. His chief works are (1) *La Grande Abridgement*, first published by Pynson in 1514, an attempt to systematise existing law in the form of a digest of the year-books; (2) *La Nouvelle nature breuium* (1534); (3) *L'office et auctorité des Justices de peas*, first published by R. Redman in 1538, who also issued a translation of it known as the *Newe Boke of Justices of the peas* by A. F. K. That part which treats of

"L'office de viscounts bailiffes escheators constables, coroners" appeared later as a separate tract (Middleton, 1545; R. Crompton, 1583); (4) *Diversite de courtes et leur jurisdictions et alia necessaria*. (Redman, 1523; Pynson, 1526, though Coke, *Institutes*, iv. c. ix. ascribes it to 21 Hen. VIII.) But beside these and possibly other legal writings, two works on agriculture are generally, and probably with reason, ascribed to Fitzherbert.

(1) *The Boke of Husbandrie* (Pynson, 1523; Treuerys, 1525?; Berthelet, 1532, 1534, 1546, 1548; Walle, 1555?; M. Marshe, 1560?; Awdeley, 1562, 1576; White, 1598; Bathurst and Newbery, 1767; Trübner, 1882) was a practical manual for the working farmer, and the numerous editions through which it passed during the 16th century afford some evidence of the estimation in which it was held, and of the need it supplied. It is generally considered the earliest treatise in English on agriculture, if we except the translation of Walter of Henley's *Husbandry*, attributed to Grosseteste.

(2) *The Boke of surueyinge and improvements* (Pynson, 1523; Berthelet, 1539, 1546, 1567; Marshe, 1587; Bathurst and Newbery, 1767) was a more technical work, based upon the statute *Extenta Manerii*, and written for the benefit of lords of manors. It describes how the survey of a manor should be taken, how its resources might be increased, and in what relations lord and tenants stand to one another. The stress laid on the advantages of enclosures, the minute directions concerning the management of sheep, the warning against the raising of rents, the incidental notices marking an increase in general prosperity, and the plea for the abolition of the still existing evil of villinage are interesting points on which a student of Tudor times may learn much from Fitzherbert, while a comparison between his experience and the practice of the 13th century, as described by Walter of Henley, is of value.

Some writers have maintained that these works on agriculture were not written by Sir Anthony Fitzherbert, but by his brother John, though the latter is not known to have written anything else. It is said that Sir Anthony's professional engagements could not have allowed him to "exercise husbandry forty years" as alleged in the *Boke of Husbandrie*. Fitzherbert as a judge must, however, have had much leisure time, which he may well have given to agricultural pursuits; and family papers show that he added considerably to his landed possessions. The difficulty presented by a comparison of his age with the date of publication of the *Boke of Husbandrie* (1523) is lessened when we remember that Fitzherbert himself merely says that he has been "an householder this forty years and more." It is Berthelet, the printer, who says that he had "exercised husbandry forty years." The fact

that he is called "mayster" instead of "Sir Anthony" in the printer's note also seems an objection of little weight. It is not known exactly when he was knighted, it was certainly before February 1522, but since, as already noticed, the State Papers, with one exception use the title "Mr." until the close of 1524, and frequently afterwards, it is not surprising to find that a printer does the same when the title "Sir" would have been more correct.

The technical character of the *Boke of Surveyinge* points to its authorship by a man intimately acquainted with the law, while various indications in the *Boke of Husbandrie* show that the writer was something more than a farmer; he was clearly a country gentleman who could make experiments, and a man of scholarly tastes who could quote the Scriptures and the Fathers as readily as the statute book.

Professor Skeat, who has discussed the matter fully in the introduction to his edition of the *Boke of Husbandrie*, may safely be followed in his conclusion that Sir Anthony Fitzherbert was the author of these books, until more convincing arguments to the contrary are forthcoming.

[Copy of brass on tomb, Brit. Mus. Harl. MSS. 3609.—Wood's *Athene Ozon.* (Bliss).—Nichols's *Leicestershire*, iv. pt. ii.—Douthwaite's *Gray's Inn.—Notes and Queries*, 6th ser. ii. iii. iv.—Ames's *Typogr. Antiq.* (Dibdin), ii. iii. iv.—Dugdale's *Orig. Jurid.—Letters and Papers For. and Dom. of the reign of Hen. VIII.*—Skeat's *Introduction to the Boke of Husbandry* (Triibner, 1882).—*Coventry Lest Book* (Town Clerk's Office, Coventry).] E. A. M.

FIVE-FRANC PIECE. Standard gold as well as silver coin of the countries forming the "Latin" Monetary Union (France, Belgium, Italy, Switzerland, and Greece). *Gold*: weight, 24·89 grains; fineness, 900; value in gold (916·6 fine at £3 : 17 : 10½ an ounce), 3s. 11½d. *Silver*: weight, 335·81 grains; fineness, 900; value in silver (925 fine at 5s. 6d. an ounce), 4s. 3½d. F. E. A.

FIVE-POUND PIECE. English standard gold coin, provided for in the first schedule to the Coinage Act, 1870, but not actually coined for circulation until 1887, on the occasion of the jubilee of Queen Victoria; weight, 616·37 grains; fineness, 916·6. A further issue of these coins was made in 1893, and another with the effigy of King Edward VII. in 1902. F. E. A.

FIX, THÉODORE (1800-1846) born at Soleure (Switzerland), died at Paris. He migrated at an early age into France, where he first carried on the profession of a land surveyor, and then occupied himself with translating German works into French. This last-mentioned employment led to his forming a taste for economic science. He obeyed this call and founded, in July 1833, the *Revue mensuelle d'économie politique*, which was the forerunner of the *Journal des économistes*. Fix's

review, however, was very coldly received by the public—though he had the assistance of Buret, Blanqui, Rossi, Sismondi, and others. This periodical came to an end at the close of the year 1836. Fix then worked on several journals, the *Siècle*, the *Quotidienne*, the *Constitutionnel*, and especially on the *Journal des économistes*. In 1840 his essay, called *Un mémoire sur l'association des douanes allemandes*, won him a prize from the Academy of the moral and political sciences. After this, Fix, though never elected a member of the Institute, was employed in working on the report on the progress of sciences since the Revolution—a work which the Institute had undertaken. Finally, in March 1846, but a few months before his death, Fix completed and sent to the printer his *Observations sur l'état des classes ouvrières*, 1 vol. 8vo, a very solid and well-written monograph, full both of common-sense and of learning, and distinguished by a high standard of enlightened intelligence. It may be read at the present day with pleasure.

[See also J. A. Blanqui, *Histoire de l'économie politique en Europe, depuis les anciens jusqu'à nos jours.*] A. C. F.

FIXED AND FLOATING CAPITAL.

Adam Smith drew a distinction between capital which yielded a profit without passing from one owner to another, and capital which did not. This distinction—which is really one between food and fuel for the support of labour and all other kinds—was modified by Ricardo into one between "goods of slow consumption" and those which "require to be frequently reproduced"; a discrimination which does not, on the face of it, profess to be scientific, and about the usefulness of which he himself was dubious. Mill, following the same train of thought, formulated the recognised classical division between fixed and circulating capital in these terms: "Capital which fulfils the whole of its office, in the production of which it is engaged, by a single use, is called circulating capital; capital which exists in any durable shape, and the return to which is spread over a period of corresponding duration, is called fixed capital." According to these definitions fixed capital is practically invested capital, and comprehends machinery, houses, public works, railways, canals, improvements to land, and anything productive which exists in a durable shape. Circulating capital, on the other hand, comprehends raw material, metals and minerals, the actual produce of land, and all that is set aside for the sustenance of labourers. Money can hardly be placed in either class; it is generally placed in the latter, although it does not fall within Mill's definition. The term "circulating" is not a very happy designation for this sort of capital; because by hypothesis it does not circulate, but is, on the contrary, consumed in a single use. The term "floating capital"

seems to be better adapted in describing the class of commodities in question.

There are two other divisions of capital, both of which ought to be noticed, as they run on lines very nearly similar to that which discriminates between fixed and floating capital. One is that between capital which directly sustains labourers, called wage-capital, and capital which only indirectly aids labourers, called auxiliary capital. The only practical difference between wage-capital and floating capital is that the latter includes raw material, which is classed as auxiliary. The other division of capital is that into specialised and non-specialised capital. Fixed capital, with the exception of houses, is generally properly to be classed as specialised; but the line of demarcation between these last-mentioned classes of capital is not to be defined with accuracy, any more than that between specialised and non-specialised labour. There is little to choose between these three classifications of capital; but that which forms the subject of the present article has come down from the earlier English economists, and is the most commonly employed.

The progress of industry is, speaking generally, marked by the increasing ratio which fixed capital bears to floating. Fixed capital really represents the saving, or foresight, which is of the essence of the creation of nearly every form of capital. On pasture and agriculture there was formerly little fixed capital employed, but this gradually increases; and in all other industries the tendency to increase the quantity of fixed capital is very great. The most striking result of this progress is, that the proportion of industries which exist for the purpose of constructing fixed capital—*i.e.* making raw material (floating capital) into machinery—constantly increases. It is this, along with other causes springing essentially from the same source, that assists the phenomenon of the slow depletion of rural districts and growth of towns and large villages. There is therefore, while the process is going on, a gradual but continuous displacement of labour which in normal periods passes unnoticed and creates little disturbance. A sudden conversion of floating into fixed capital on a large scale, however, has always a very serious effect, at least temporarily, on labour; and this at many periods has caused new machinery to be unpopular with the working classes. There are two ways in which a conversion such as that mentioned affects labour. If a large quantity of capital is withdrawn from agriculture, and invested in machinery on permanent works, (the illustration given by Professor Fawcett, *Manual of Political Economy*, ch. iv.), there is not the same quantity of the annual return from the converted capital available for consumption. It must be remarked that this result can only be temporary. In the long

run, floating capital is increased by the growth of fixed capital, but at a much slower rate, and it is liable to great fluctuations, as it depends on the continued existence and success of the industries in which the fixed capital is invested. The other manner in which labour is affected by a great conversion of floating capital is this: such a change means in effect the specialisation of a quantity of capital, and as specialised capital generally employs specialised labour, the workmen have to learn to change their business if they want to get employment. The demand for skilled labour increases suddenly, and the unskilled man suffers.

A country which possesses a great stock of fixed capital has the main element of financial strength, and the chief contributor to national credit. It may be observed, however, that when a country comes to be the scene of a war, its loss, and the consequent distress of its inhabitants, are greater where much fixed capital exists. The destruction of a harvest is the destruction of a year's agricultural income; the breaking-up of machinery and works is a breach made in national capital.

[Adam Smith, *Wealth of Nations*, bk. ii. ch. i. —Mill's *Principles*, and *Unsettled Questions in Political Economy*, essays iii. and v.—Marshall's *Principles of Economics*.—Marx, *Das Kapital*.—Cairnes, *Leading Principles*.] M. G. D.

FIXED INCOMES do not afford a constant benefit to the recipients when the value of money changes. Incomes may be thus classified according to the degree in which they are affected by a change in the value of money (Jevons, *Currency and Finance*, p. 96). (1) Incomes derived from funds, annuities, mortgages, etc., where the whole loss or gain consequent on depreciation or appreciation falls upon the holder. (2) Incomes made up of "fixed charges established by law or custom or convenience, such as the fees of lawyers, physicians, etc." The increase of business consequent on a virtual reduction of charge may here make some compensation, as in the case of traffic increasing with the diminution of tolls. (3) Incomes "entirely independent of the value of gold," such as those of manufacturers, merchants, artisans, etc.; from which class, however, must be excepted salaries and wages which, though not fixed, are slow to move.

To correct the evils incident to the fixity of incomes—the loss to the recipient in case of depreciation, to the community in case of appreciation—is one of the objects proposed by schemes designed to obviate the change in the value of money, as CORN RENTS, and a TABULAR STANDARD. (See also INDEX NUMBERS.)

F. Y. E.

FIXTURES. The older law, both of England and Scotland, allowed no exception to the maxim that whatever was fixed to the soil went with it. Accordingly, every object, even

though originally movable in character, that had once been fixed to land or to a building, became a part of that land or building, and could not be removed at the will of the person who had fixed it. It thus became a fixture. The property of the landlord in the same sense as the rest of the land or building. But between things fixed to the soil, so as to render the premises complete and ensure the appropriate use of them; things difficult to move on account of their weight; and things temporarily attached for convenience' sake, with no intention of transferring the property in them, it became difficult to distinguish, and the maxim was unduly harsh in its operation. The early rules of law remain on the whole in force in questions between heirs-at-law and personal representatives, except in particular cases where such objects as mirrors, pictures, tapestries, and the like have been held not to have been fixtures, and between personal creditors and mortgagees. As between lessors and lessees, however, there has been a considerable relaxation of the older rules; and the rule seems now clear in England, not quite so clear in Scotland, that fixtures put up for trade purposes or for domestic use may, as against the lessor, be removed by the lessee, or severed from the tenement, and that they thereupon regain their character as movables and as the personal property of the lessee; provided that what he so does he must do during the term or during the continuance of his possession as tenant, and that the tenement is not to be injured or impaired in its use by the removal. Such fixtures are called "Tenants' Fixtures," while those which must remain attached to the Freehold are called "Landlords' Fixtures." This relaxation was not effectively extended to agricultural tenancies until the passing of the Agricultural Holdings Act of 1883, by which it was provided that agricultural fixtures or buildings, for which the tenant was not entitled to compensation under the act, or which he was not bound by his agreement to put up, or had not put up instead of some fixture or building belonging to the landlord, might be removed by the tenant before the end of his tenancy, on condition that he had paid his rent, etc.; that no avoidable damage was done; that any actual damage was made good, and that notice was given and an option given to the landlord to purchase the fixtures or buildings at a valuation.

A. D.

FLEETWOOD, WILLIAM (1656-1723),—the first English collector of statistics of prices,—became fellow of King's College, Cambridge; gained reputation as a preacher with strong Whig sympathies, and was appointed successively canon of Windsor (1702), bishop of St. Asaph (1708), and bishop of Ely (1714).

In 1707 Fleetwood published anonymously his *Chronicon Preciosum; or an Account of English Money, the Price of Corn and other*

Commodities for the last 600 years; in a Letter to a Student in the University of Oxford. The question had been presented to him how far the statutes of a certain college (founded between 1440 and 1460), which vacated a Fellowship if the Fellow had an estate in land of inheritance, or a perpetual pension, of five pounds per annum, were binding in conscience. Fleetwood answered that this rule must be interpreted according to the changed value of money; and the purpose of his book was to determine what that change had been. He concluded that "£5 two hundred and sixty years ago, was equivalent to £28 or £30 now." But his treatise took a wider range; it brought together all the information he could find on the values of money and the prices of commodities during the Middle Ages in England; and it is still well worth consulting. His figures were taken almost exclusively from chronicles; but he clearly foretold such inquiries as those of Mr. Thorold Rogers. "The Gentlemen of each University," he remarked, "will have it in their Hands to make what Amendments they shall see good, out of their old *Rolls and Bursars' Accounts*; which I look upon as the most sure Guides in Enquiries of this Nature; because our General Histories do mostly give us the Prices of Things which are *Extraordinary*, either for *Cheapness* or for *Dearness*. Whereas the *College Accounts* deliver faithfully the *ordinary* and *common* Price of most Commodities and Provisions."

Fleetwood's sermons frequently dealt with subjects of current interest. Thus in 1694 he preached a *Sermon against Clipping* before the Lord Mayor at Guildhall Chapel, wherein he considered "First, The Use and Necessity of Money to the carrying on the Trade and Commerce of the World; Secondly, the Mischiefs of corrupting and debasing Money, the Coining of bad Metal, or the clipping and stealing from good; Thirdly, the Reasonableness and Justice of the Laws which punish such Offenders." So also he published in 1720 (during the South Sea Panic) a *Sermon*, preached some years before to a City congregation, *On the Justice of Paying Debts*.

A *Complete Collection of the Sermons, Tracts, and Pieces of all kinds that were written by . . . Dr. William Fleetwood*, was published by subscription in 1737.

W. J. A.

FLETCHER, ANDREW (1655-1716), of Saltoun, published a remarkable discussion of pauperism in Scotland at the end of the 17th century (*vide the Second Discourse*, etc. in *Two Discourses concerning the affairs of Scotland*, Edinburgh, 1698; reprinted in Fletcher's *Political Works*, London, 1737, 8vo). He points out that the bad seasons of 1695-1698 were a special cause of poverty, but he attributes its origin to the church, "which encouraged setting slaves at liberty." . . . "Provisions by hospitals, almshouses, and the contributions of

churches or parishes, have by experience been found to increase the numbers of those that live by them. And the liberty every idle and lazy person has of burdening the society in which he lives, with his maintenance, has increased the numbers to the weakening and impoverishing of it: for he needs only to say that he cannot get work, and then he must be maintained by charity" [p. 129]. Then, regarding "not names, but things," Fletcher expresses the opinion that slavery is preferable to a bad system of workhouses. While he does not defend "any of those bad and cruel regulations about slaves," he "proceeds to explain under what conditions they might be both good and useful, as well as I think they are necessary in a well-regulated government." According to his scheme the master is not to have power over the slave's life, or for mutilation or torture. The slave, his wife and children, are to be provided with clothes, food, and lodging, to be educated at the master's expense, and to have Sunday holidays. Except in matters relating to their duty as servants they are to be under the protection of the law and not subject to the will of their masters. They are not to possess property, and they may be sold, *i.e.* Fletcher explains, their services may be alienated without their consent. He proposes to compel "every man of a certain estate" to take a proportionate number of vagabonds on those conditions and to set them to work. Under such a system he maintains that they would be better off than those who "having a power to possess all things, are very often in want of everything."

[A full life of Fletcher is given in the *Dictionary of National Biography*, vol. xix.] W. A. S. H.

FLEYLAND is satisfactorily explained by Vinogradoff (*Villainage in England*, p. 170) as land held by the villein tenure of agricultural work (*ad furcam et flagellum*, *i.e.* by pitchfork and flail), not by payment of rent. E. G. P.

FLOATING CHARGE is the name given to the general charge of the undertaking of a company frequently given in favour of debenture holders (see DEBENTURE; DEBENTURE STOCK). The expression "*floating charge*" implies that it does not attach to any specific property but to all the property held by the company at any particular moment subject to the company's right to dispose of it in the ordinary course of their business. It is only in case of default or liquidation proceedings that the charge becomes effective. A receiver may then be appointed who takes possession of all the assets, and the general creditors will be shut out. A floating charge, like all other mortgages, ought to be registered in the company's register of charges (Comp. Act, 1862-73), but as the omission to register does not entail any consequences except the payment of certain penalties by the parties responsible for the omission (*Wright v. Horton*, 12 Appeal Cases, 371), the creditors of a company

can never know whether, in the case of a winding up, their claims will not be frustrated by debenture holders, the legislature having given additional facilities for the creation of secret charges by declaring that the Bill of Sale Act of 1882 (see BILL OF SALE) does not apply to the debentures of a company. Up to recent times creditors who were secured by a specific mortgage of any part of a company's property were comparatively safe, but the ingenuity of company lawyers has found a new method of defeating their claims, as well as those of unsecured creditors, by inserting an additional clause in debentures by which the company undertakes "not to create any mortgage or charge in priority" to the debentures in question. E. S.

FLOATING DEBT. The expression "Floating Debt" in state finance is used as equivalent to "unfunded" and opposed to "funded debt." The floating debt of a state is generally intended to be repaid within a comparatively short period, but it may also be raised in that form in order to be converted into funded debt at a subsequent period. A part of the floating debt of the United Kingdom consists of temporary advances required for the supply services in anticipation of revenue payable at a later period within the same financial year, but it also happens that expenditure is incurred for objects for which an addition to the funded debt does not seem justified, but which cannot conveniently be raised out of one year's revenue, and in such cases the creation of a floating debt repayable within a fixed number of years is a useful expedient. Thus for instance the Naval Defence Act 1889 provides that the sums required for the purpose of building certain vessels may be raised by the creation of floating debt repayable within seven years.

A good recent instance of the creation of floating debt, subsequently converted into funded debt, was the issue of exchequer bonds, for the purpose of paying off holders of consols who were unwilling to convert under Mr. Goschen's Act; their bonds were afterwards, through the operation of the National Debt (Conversion of Exchequer Bonds) Act 1892, exchanged against a charge in favour of the holders which now forms part of the funded debt. The effect of the operation will be seen by comparing on the table given below the respective amounts of funded and unfunded debt for 1892 and 1893.

The floating debt consists of advances made by the Bank of England, exchequer bonds repayable within a fixed number of years, interest being payable at fixed intervals in the meantime, and treasury bills repayable at much shorter periods and issued at a discount in the same way as mercantile bills. Terminable annuities are also in a certain sense part of the floating debt; they are partly used like

exchequer bonds for the purpose of spreading expenditure over a number of years, and partly also for the purpose of paying off funded debt. As the National Debt is to a great extent held by public bodies, a conversion of funded into unfunded debt for the purpose of ultimate repayment can always be easily arranged if the state of the finances allows such an operation. The proportion of floating to funded debt is shown below. The unfunded debt rose greatly after the South African War (1899-1903):—

Year.	Funded debt.	Capital value of terminable annuities.	Unfunded debt.
	£	£	£
1836	760,295,000	60,698,000	30,083,000
1843	774,859,000	48,112,000	18,684,000
1853	764,541,000	31,862,000	17,743,000
1863	787,423,000	18,074,000	16,495,000
1873	727,374,000	47,019,000	4,829,100
1883	712,699,000	27,571,000	14,185,000
1892	577,945,000	64,422,000	35,313,000
1903	640,085,726	55,560,036	75,133,000
1905	635,682,863	47,756,246	71,633,000

The annual interest charge on the unfunded debt in 1893-94 was £486,000.

The disadvantage of a floating debt, especially in the shape of short treasury bills which have frequently to be renewed, is that in a moment of financial crisis it might be difficult to find new takers, when current bills fall due; but when it is remembered that a considerable part of the amount granted by parliament for the service of the debt is used for the repayment of capital, and that, in case of necessity the commissioners, instead of purchasing consols, may use the sinking fund for the repayment of treasury bills, this risk in view of the comparative smallness of the amount does not seem a serious one.

The expression floating debt is also used in the case of large mercantile and industrial undertakings, more especially in the case of railways, to distinguish trade debts and debts borrowed from banks for temporary purposes from debts incurred by the issue of DEBENTURES (*q.v.*) or DEBENTURE STOCK (*q.v.*). The priorities as between the debenture-holders and the other creditors depend on the special circumstances of each case and the law of the country in which the debtor's undertaking is situated.

[As to the theoretical aspects of the subject of floating debt in state finance, see Roscher, *Finanzwissenschaft*, § 143.] E. S.

FLOATING POLICY (Marine Insurance). A floating policy is a policy which designates the subject matter insured in general terms, and leaves the name of the ship, the particular subject matter, and the value of it to be defined by subsequent declarations. The

declarations may be made by indorsement on the policy or in other customary manner, but the general rule is that they must be made in order of shipment and with reasonable diligence. When a declaration of value is not made until after notice of loss, the policy must be treated as an open, and not as valued policy, as regards the subject matter of that declaration.

[See Arnould's *Marine Insurance*, ed. 6, p. 337.] M. D. C.

FLOREZ ESTRADA, ALVARO (1765-1853), entered early the financial administration of Spain, and was appointed in 1798 *procurador general de las Asturias*. As such he contributed powerfully to the organisation of the resistance to Napoleon, and was promoted, in 1813, *asistente* in Seville: his jurisdiction extended over the whole of Andalusia. During the troubled reign of Ferdinand VII. he was twice obliged to take shelter in England, where he devoted himself to the study of political economy. After the establishment of the constitutional monarchy during the minority of Queen Isabella, he returned to Spain and was appointed a member of the senate, over which he presided. In 1851 he was elected a corresponding member of the French *Académie des Sciences morales et politiques*.

Florez Estrada is considered the most distinguished Spanish economist of the first half of this century. He published in 1814, in Madrid, his *Examen imparcial de las discusiones de America*, in which he advocated the emancipation of the Spanish colonies of the New World. Later on, he wrote a pamphlet entitled *Efectos producidos en Europa por la Laja en el producto de las minas de plata* (London, 1824), on the effects of the reduced production of the silver mines and his *Examen de la Crisis Comercial de la Inglaterra*, translated into French under the title: *Réflexions sur la Détresse Commerciale de la Grande Bretagne* (Paris, 1826). But his principal work is his treatise of political economy, of which different editions were issued in London (1828), Paris (1831), and Madrid (1841 and 1848), sometimes under the title of *Tratado* and sometimes of *Curso de Economía Política*. A French translation under the appropriate heading of *Cours Éclectique d'Économie Politique* appeared in Paris and London in 1833 (3 vols. 8vo). In fact, Florez Estrada was not, and expressly disclaims being, an original writer, whilst he candidly confesses his obligations to Ricardo, McCulloch, and James Mill. But he is by no means their indiscriminating follower, and, for instance, freely criticises some of their views on the advantages of a paper currency. He insists on the necessity of what is now called a high standard of life for the working classes; "nations cannot prosper if the working classes are not active, intelligent, and industrious; this is impossible if their wages are not

the immediate neighbourhood. Railways are great factors in the local flow of capital. A railway established between two large centres of industry must necessarily pass through the intervening country, and it encourages men to set up factories or other industrial undertakings near it, which in time attract capital. Lancashire and the West Riding of Yorkshire, and, in a minor degree, Lanarkshire, have come to possess the enormous amount of fixed capital they can lay claim to from such causes as these. On the other hand foreign tariffs may cause a flow of capital in the home country, though this is more properly industrial than local. Protracted struggles between employers and labourers are also credited with a certain quantity of force in driving capital from the locality in which they occur.

3. *Industrial*.—This is the form of the movement of capital which causes the greatest disorganisation of labour, and the most acute hardship, though it is, according to some, most generally beneficial in the end. The introduction of machinery and the comparative depletion of the rural districts are phenomena traceable to it, as they involve the conversion of floating capital into fixed.

Foreign tariffs and inventions assist the natural forces of supply and demand to promote the flow of capital from one trade to another. Capital will flow readily into those channels where for the time being the price gives an extra profit because of great demand; but where the transference is necessitated by over-production of some commodity, there cannot fail to be a temporary loss, and a permanent loss to the individual capitalist. The withdrawal of agricultural capital in England during the last three decades must have involved those whose capital was formerly invested in land in very serious loss; and similarly the transference of capital from the sugar industry to others cannot be effected without severe loss, and is not due to the large profits to be made elsewhere, but to the diminution of profits in the refining trade, owing to foreign bounties.

[Walker's *Political Economy*, pt. ii. ch. iii.—*Wealth of Nations*, bk. ii. ch. i.—Mill's *Principles of Political Economy*; and *Unsettled Questions in Political Economy*, Essays 3 and 5.—Cairnes's *Leading Principles*.—Marshall's *Principles of Economics*.—Marx's *Capital*.] M. G. D.

F. O. B. An abbreviation for *free on board*. Goods shipped from one country to another are generally sold either *f. o. b.*,—in which case the purchaser must pay freight and insurance; *c. and f.*,—cost and freight, in which case the vendor has to pay the freight; or *c. i. f.*,—cost, insurance, freight, in which case the vendor has to pay both insurance and freight. E. S.

FŒNUS NAUTICUM. The requirements of maritime commerce induced the Romans to adopt from Greece a peculiar kind of contract

of loan. This originally consisted in borrowing a sum of money to be taken by sea to a particular place for the purpose of buying merchandise there, the condition on which the contract depended being that, if the money was lost on the voyage by accidental perils of the sea, the borrower should not be bound to repay the lender. Money lent on such terms is called *trajecticia pecunia*, because of its being carried over the sea (*quia trans mare vehitur*). Subsequently the contract was extended, so that *trajecticia pecunia* included money lent to buy goods for export to a port agreed on, the repayment of the loan depending on the safe arrival of the goods there. Such goods were frequently pledged to the lender as security for the debt, but this was not necessary. Loans made for the purpose of repairing a ship, or for paying the crew their wages, were also brought under the same rule, the condition of repayment being the safe arrival of the ship at the port of destination. As in this contract the risk of accidental loss was on the lender, not on the borrower, as in ordinary cases, he was allowed to charge more than the ordinary legal rate of interest on money loans. The maximum rate of interest on account of *trajecticia pecunia* was fixed by Justinian at 12 per cent. The technical term for interest on such a loan is *fœnus nauticum* (see BOTTOMRY). It was treated as innocent even by the CANON LAW. E. A. W.

FOLKES, MARTIN (died 1754), wrote *Tables of English Gold and Silver Coins, with their Weights, Intrinsic Values, etc.*, London, 1745.

"A new and much improved edition of these valuable tables, illustrated with numerous plates of coins, edited by Dr. Andrew Gifford, was published in London, 1763." McCulloch's *Lit. Pol. Ec.*

FOLKLAND was the surplus land which was not distributed to the free or dependent village communities when the English tribes conquered and settled in Britain. It must be carefully distinguished from the common lands which belonged to a community, but were not distributed among individuals (see ALOD). The folkland was regarded as the property of the tribe, and after the union of the tribes to the nation, it could be alienated to individuals by *boe* or charter granted by the king and his witan (see BOCLAND). It could also be let out to individuals on payment of a rent usually in kind, and these rents were collected by the sheriffs and formed part of the royal revenue. The above view has been held by all the chief authorities on the early constitutional history of England. But Prof. Vinogradoff, in an article in the *English Historical Review* for January 1893, has argued, with great force, that folkland does not mean the land of the folk, but land held by folkright, *i.e.* that it is the same as what the older authorities call *alod* or *ethel* (see FEORMFULTRUM).

[Stubbs's *Constitutional History*, i.—Kemble, *Saxons in England*.] R. L.

FONFRÈDE, HENRI (1788-1840), the son of a well-known Girondist member of the convention, was one of the most active journalistic writers of France during the first half of this century. His articles and essays, scattered in five or six different Bordeaux and Paris newspapers, were collected after his death and published in ten volumes (*Œuvres de Henri Fonfrède*, Paris and Bordeaux, 1844-48). The volumes seven and eight, entitled *Questions d'Économie Publique*, contain his economic writings, and one of them, *Le Système Prohibitif*, a luminous and incisive plea in favour of free trade, was republished as a pamphlet in 1846 by the *Association pour la Liberté des Échanges*. Fonfrède, very independent in his views, remained throughout his life a steady opponent of the conversion of public debts ("there is no more reason for a *maximum* price of 100 francs for public stock than for the same *maximum* price for coffee"—vi. p. 227), of sinking funds ("is it not mere folly to pay off in order to borrow, and to borrow in order to pay off?" *Système Prohib.*, p. 61), of Algerian colonisation, of commercial and administrative centralisation in Paris, and of government measures proposed to facilitate the raising of money on landed securities ("Every attempt to render land more fluid is an intense political and economic mistake. Land must be made easy to divide, not easy to mobilise."—vii. p. 231). E. ca.

FONTANELLI, CARLO (died 1886, at Florence), was professor of political economy at the Scuola di Scienze Sociali in Florence. Author of—

Manuale popolare di Economia sociale, Firenze, 1870, 2nd ed. 1881; *Gli scioperi*, Napoli, 1874-75.

A. B.

FONTEYRAUD, ALCIDE (1822-1849), born in the island of Mauritius, died at Paris. He became at a very early age a teacher in the higher commercial school under Blanqui, whose pupil he had been. Political economy soon absorbed him, and after March 1845 he was placed on the staff of the *Journal des économistes*. In January 1846, the *Revue britannique* published an article by him entitled "La ligue anglaise" (Anti-corn law league), which brought him into the notice he so well deserved. After this Messrs. Guillaumin entrusted him with annotating and preparing for publication the works of David Ricardo (vol. xiii. *Collection des Principaux Économistes*), which appeared in 1847. Fonteyraud was enabled, through his perfect knowledge of the English language, to translate the works of that economist, which up to that time had never appeared in French, and also to revise the translation made by Constancio. Fonteyraud wrote at the commencement of this volume, which is occupied entirely with the works of Ricardo and notes

made on them by J. B. Say and others, a brilliant and interesting notice of the great English economist, who up to that time had been but little understood on the continent. He also translated the *Definitions in Political Economy* by Malthus. He finally wrote for the collection *Encyclopédie des connaissances utiles, Principes d'économie politique* (8vo, 1849). L. Wolowski had no hesitation in endorsing the opinions expressed in this volume. Fonteyraud was removed by cholera at the age of twenty-seven years from the study of that science to which, had it not been for his premature death, he would doubtless have rendered signal services. His principal works were collected by Joseph Garnier and published with a notice from the pen of that writer, under the title of *Mélanges d'économie politique*, 1 vol. 8vo, 1853.

A. C. f.

FOOD-RENTS existed in Anglo-Saxon and earlier manorial times side by side with rents in labour and in money. They were included under the general name of *gafol*, tribute, which comprised other payments of produce besides actual food; and they were payable by freemen as well as serfs, in contradistinction to the labour services known as week-work which were usually a mark of villein status. The food-rents paid to the lord of the manor may be connected in origin with the *FEORM-FULTUM* and the later *PURVEYANCE* (*q.v.*), payable for the use of the king and his court; they may perhaps be considered as taxes or exactions rather than as economic rents. Owing to the frequent absence of the lord these rents would be commuted for money earlier than labour rents, which could be paid just as conveniently in the lord's absence as during his residence on the manor; and it is pretty certain that the free tenants who paid rents in kind did become money-paying tenants earlier than the serfs who owed week-work as well as produce. The commutation was general by the 14th century, but the dates of the stages of the process cannot be exactly given as payments in kind are found mixed, apparently without system, with original and commuted money payments in most statements of manorial services and rent drawn up before that time. The commonest articles of food paid by the tenants were poultry and eggs, but oats, barley, malt, ale, sheep, pigs, meat, loaves, honey, occur often; evidently the manorial household expected to be provisioned by the tenants, and it was not uncommon for a definite part of the estate, the lands, for instance, of a monastic house, to undertake such provisioning for a week, a fortnight, or some other fixed time. The growing need for money helped to put an end to such rents as well as to labour dues.

[Seebohm, *English Village Community*, 1883.—Vinogradoff, *Villainage in England*, 1892.]

E. G. P.

FOOD, TAXES ON. These were common in

the 18th century, in the form of duties on flour, bread, and meat (*Wealth of Nations*, bk. v. ch. ii. pt. ii. art. iv.). They have now disappeared as general internal taxes, the last instance being the Italian Grist Tax (see MACINATO). They still exist as CUSTOMS DUTIES (see also CORN LAWS), and also make a part of local taxation in France and Italy (see OCTROI; SALT DUTIES). In theory they may be treated as one division of taxes on necessities. The general discussion of their effect belongs to TAXATION (q.v.). C. F. B.

FORBONNAIS, FRANÇOIS VÉRON DE (1722-1800), born at Mans, died at Paris. Though he never occupied any official position or received any appointment equal to his merits, Forbonnais exercised a great influence over his contemporaries. He came of a respectable business family, and began life in retail trade; he then travelled for five years, and afterwards improved his knowledge of affairs by studying the workings of business on a large scale at Nantes for the same period of time. By 1752 he considered his economic education sufficiently advanced to justify him in preparing a memorial on the position of public affairs which he then presented to the controller-general of Finance, an office filled at that time by J. B. de Machault, a financier of high ability. Through an unfortunate accident his memorial was not read, and its author became discouraged. Forbonnais then resolved to address himself directly to the public, and he printed a great number of works of which we can only mention the most important. These are *Considérations sur les finances d'Espagne*, 1753, 1 vol. 12mo; *Éléments du commerce*, 1754 and 1796, 2 vols. 12mo; *Recherches et considérations sur les finances de France depuis 1595 jusqu'en 1721*; Bâle, 2 vols. 4to, and Liège, 6 vols. 12mo, 1750; *Principes et observations économiques*, 1767, 2 vols. 12mo (reproduced in Guillaumin's collection of the principal economists); and finally *Observations succinctes sur l'émission de deux milliards d'assignats* 1790, 1 vol. in 12mo. Forbonnais was never able to free himself from the errors of the mercantile system, and shows himself favourable to the theory of the balance of trade. Besides this he was a protectionist, although he considered that the rate of duty, beyond which no branch of industry had any rights to existence at the cost of the consumer, should be limited to 15 per cent. How many ministers in our own days would be excused by the supporters of free trade if they would only restrict their demands to this scale! Forbonnais, however, showed himself in other respects so sound an economist and financier, and so distinctly opposed to all crotchets, that he has left behind him a well-deserved reputation. His works are read and quoted even at the present day. He was consulted by all the influential politicians,

and by all the great administrators of his time. Silhouette placed him at the head of his office in 1759; Forbonnais had at that time filled the office of inspector-general of the mint for three years. Causes which were entirely honourable to himself led to disagreements between him and Madame de Pompadour, and he was sent to reside in exile on his estates. One of his unquestioned merits consists in having endeavoured to apportion the incidence of public taxation equally among all classes. Forbonnais did not solicit office in 1789, contenting himself with writing many detached papers, still in manuscript, on economic subjects. He controverted the doctrines of the physiocrats, but, it must be admitted, without seriously impugning their arguments. Forbonnais was admitted to the Institute in 1794 and died six years after, leaving behind him the reputation of a man conscientious and sincere, whose judgment was of the highest delicacy, who was an indefatigable worker of a frank and vigorous temperament. A. C. F.

FORCED CURRENCY usually implies two attributes: it must be received as legal tender; it need not be cashed on presentation. As Prof. Walker points out, the character of force may exist even in the absence of the first attribute,—for instance, money "may not be made legal tender, but all remedy at law may be taken away from creditors who refuse to receive it." It is argued that the silver currency of India is in this position at the present time (1894).

For other incidents, and for examples of forced currency, see INCONVERTIBLE CURRENCY.

F. Y. E.

FORCED LABOUR, COMMON CHARACTERISTICS OF. In the articles on CONSCRIPTION; CORVÉE; ENFRANCHISEMENT; IMPRESSMENT; MANOR; SERF; SLAVERY, will be found details relating to the principal ways in which forced labour has come into prominence at various stages in the history of society. Here it is proposed only to deal with the common characteristics of these systems of labour. One classification may divide the subject into two branches. Forced labour may be either an industrial phenomenon or a financial one. Slavery and the kindred institution of serfdom arise in the relations between individuals; corvée and conscription, and all other methods by which the state exacts unpaid labour from the citizen, are, apart from political considerations, rather in the nature of financial expedients. Similar economic disadvantages are found in both these classes, although the second is to some extent free from the moral stigma attached to the first class. An important disadvantage is that the labour is more inefficient than paid labour, and less susceptible of control and organisation. The labourer naturally treats the doing of the

work, and not the efficiency of it, as the main thing that concerns him, and any relaxation in the method of compulsion employed may result in the labourer's abandoning his task altogether. The *Report of the Poor Law Commissioners of 1834*, ch. iv., shows how difficult it was found to compel the paupers to work on the roads by way of task work. Many authorities have insisted upon the greater cost of slave labour as compared with free, and the necessity of supervision and management entailed by its use. Even in the case of the forced labour exacted from jurymen, the quality of the work is found to be inferior, in spite of the fact that an effort is made to impress the juror with a sense not only of the responsibility but also of the dignity of his position. Where, however, a moderate degree of labour is demanded for purposes of obvious public advantage from fairly enlightened citizens the system may succeed. In the early history of the Canadian colonies the statute labour exacted for the repair and construction of roads was willingly contributed, and men were even found ready to work beyond the time demanded of them. It need scarcely be pointed out that these conditions are not likely to be often discovered in any ordinary industrial system based upon forced labour.

Forced labour has been employed in many countries for penal purposes; and in England it is frequently used in the administration of the poor law as a test of real destitution. Secondary effects have been supposed to be produced in this way on the labour market, and it has been alleged that the wages of unskilled labour have been depressed by the competition of prisons in the same trade; for the questions arising hence see PRISON LABOUR; WORKHOUSES.

C. G. C.

FORCED LABOUR, instances of. Egypt affords in the Great Pyramid the earliest example of the employment of such labour. According to Herodotus (bk. ii. ch. 124), Cheops "closed the temples, and forbade the Egyptians to offer sacrifice, compelling them instead to labour, one and all, in his service . . . 100,000 men laboured constantly, and were relieved every three months by a fresh lot. It took ten years' oppression of the people to make the causeway for the conveyance of the stones. . . . The Pyramid itself was twenty years in building." But if we accept the conjecture of Mr. W. M. Flinders Petrie (*The Pyramids and Temples of Gizeh*, 1885), that the work of transport of the stones had only to be performed each year during the three months of inundation, when the land was under water and the inhabitants were necessarily almost idle, the hardship of thus requisitioning the labour of the people in a great measure disappears.

Coming to modern times, we find in the CORVÉE (*q.v.*) the general application of forced

labour to the construction and maintenance of roads. In England, statute labour, as it was called, finally disappeared in 1835, but in France the *corvée*, in its modified form of PRESTATION (*q.v.*), still exists as an effective working system. The municipal council having, in exercise of the law of 21st May 1836, voted three days' *prestation*, every inhabitant of the commune between the ages of eighteen and sixty who has elected to work in lieu of making a money payment, is called on to attend at a convenient period fixed by the prefect. The work, usually breaking and carrying stone, may be performed by the day or piece, the latter method being favoured by the authorities as giving more satisfactory results. The money payment, which may be substituted for *prestation en nature*, is fixed annually by the departmental assemblies, and is always below the real value of a day's work. But the peasants for the most part prefer to give their labour rather than their money, 65 per cent of the total value (57,000,000 frs.—say £2,280,000) of the three days' *prestation* in 1888 being acquitted *en nature*. The proportion thus acquitted has, however, steadily decreased from 81 per cent, the average for the decade 1837-46. It is estimated that one-tenth of the cost of the work is saved by the system of *prestation* as compared with the employment of contractors. The system is often attacked as a survival of the hated *corvée*, but in 1888 sixty-seven of the departmental assemblies were in favour of its maintenance (Say et Chailley, *Nouveau Dictionnaire d'Économie Politique*, 1891).

If we except the system of *prestation* now existing in France, we must turn to Egypt for the last as well as the first chapter in the history of forced labour. From the earliest time it is probable that the irrigation canals were made and kept in repair by the forced unpaid labour of the Egyptian people. Theoretically speaking, there was no great objection to this, for the very life of the country has always depended on the maintenance of the means of irrigation. Until the nineteenth century only one crop a year was yielded, sown as the Nile water receded in November, and requiring little attention till reaped in April. The agricultural labourer had little to do at other seasons, and could not be better employed than in clearing out the canals leading to his fields and repairing the Nile embankments which defended him from inundation. Therefore, though it cannot be supposed that the burden of the *corvée* was fairly apportioned, or that the rich took their just share with the poor, the evil was not a very crying one. But the introduction of cotton and sugar-cane cultivation caused an important change. These crops require to be moderately watered all round the year, and for their culture a system of summer canals had to be dug, so deep as to take in

water at the lowest Nile. These canals were yearly choked with the mud deposit of the Nile flood, and for miles of their course had to be cleared, the depth of silt being as great as from 6 to 10 feet. For this purpose, the *corvée* was annually called out, and as the Khedive and other large proprietors generally evaded their liability to furnish men, the burden of the work, which was far heavier than any previously required, fell on the poor, and this at a period of the year when their time had become valuable to themselves. Thousands of persons were forced to work for five or six months in the year, without pay or any provision of food, without proper tools, often far away from their homes, and on canals from which they could themselves derive no advantage. In the years 1878, 1879, and 1880, it is estimated that 188,000 men were summoned to the works. In 1883, the *corvée* was equivalent to an army of 202,650 men working for 100 days. This was the last year of the old régime, for in 1884 the irrigation service was placed in the hands of English engineers. Partly owing to improved methods of regulating the Nile waters, whereby the quantity of silt was diminished, and partly to the expenditure of £73,461 in payment for work done by contract, the *corvée* in 1884 was reduced to the equivalent of 165,000 men for 100 days, and in 1885, with an outlay of £116,535, a further reduction to 125,936 men was effected. Part of this last-mentioned sum was provided under a scheme, whereby the *corvéables* in certain districts were allowed to redeem themselves by a money payment. An immense increase in the cotton cultivated in these villages followed.

The evils of the *corvée* system, and the great economic advantages that would ensue from its abolition, were so strongly recognised by the new Ministry of Public Works that in 1885 they proposed that a sum of £250,000 net, which had been decreed for the reduction of the land tax, should be applied instead in abolishing the *corvée* as far as possible, such an application being considered as really the best method of relieving the burdens on land. It was estimated that the whole work of clearing the canals would cost, by contract, about £400,000 a year, so that a moderate *corvée* would still be necessary after expending the available sum. The proposal was adopted; the numbers employed were reduced to 95,093 in 1886, 87,120 in 1887, and 58,788 in 1888. The beneficial effects of the change were so apparent that the total abolition of the *corvée* was at once generally demanded. A further sum of £150,000 was required, and in December 1889 the National Assembly, although composed almost entirely of landlords, without a dissentient voice passed a measure imposing a special tax on land to raise that amount. The new tax was, as a matter of fact, never levied,

the needful fund being eventually provided out of savings from conversion of debt.

In 1890 the *corvée* in Egypt, as a regular system of forced labour for the execution of public works, thus ceased to exist. A large but gradually diminishing annual levy of men, it is true, is still made to guard and, in the event of a breach, to repair the Nile banks during the season of flood; but every fellah feels a direct interest in this duty, and the obligation to perform it is not a hardship at all comparable to the tremendous labour of clearing the canals, to say nothing of the hundred and one illegitimate objects for which the *corvée*, now suppressed, was formerly employed (Milner's *England in Egypt*.—Blue Book, Egypt, No. 1, 1902).

The Suez Canal having been projected at a time when the *corvée* was in full operation in Egypt, it is not surprising that forced labour should have been largely employed in its construction. By a contract entered into with M. de Lesseps in July 1856, the Viceroy, Mohammed-Said Pasha, engaged that workmen should be supplied by the Egyptian government, on the demand of the chief engineers of the canal, at wages to be fixed according to the average rate paid in the country by private individuals. The wages actually paid being, however, far below the market value of the work, the arrangement was very economical as far as the company was concerned, and between 20,000 and 30,000 men (at one time 80,000) were pressed into the service. This compulsory employment of the natives gave rise to remonstrances in the English House of Commons, based on humanitarian grounds, and partly on this account and partly because the men were withdrawn from cultivating his own lands, the successor to Saïd Pasha, Ismail, was anxious to retire from the obligation of finding forced labour for the company. Consequently, by diplomatic note of 6th April 1863, the Porte, "seeing in the stipulations for the providing of workmen a contravention of the laws under which the Ottoman Empire is governed," declared its opposition to the continuance of the works. This determination was a great blow to the company, which now had to engage European labour as well as the voluntary services of the natives. The result was to more than treble the cost of excavation. As compensation for the loss entailed by the withdrawal of the forced labour, the Egyptian government, on the award of the Emperor of the French acting as arbitrator, paid the company 38,000,000 frs. (say £1,520,000). It may be added that the note of the Porte did not prevent the Viceroy from continuing the long-established custom of employing forced labour without pay in the cultivation of the vice-regal lands, and that the gross abuses arising under this system only came to an end when,

under the British occupation, the lands themselves passed from the control of the Viceroy (Percy Fitzgerald, *The Great Canal at Suez*, 1876).

The history of forced labour in Egypt illustrates in a striking manner the theoretical justification of the system, its economical advantages when legitimately used, and the economic loss arising from its abuse. It is capable of defence on the same grounds as compulsory military service, when used for purposes with which the vital interests of the nation are bound up. Where money is scarce, it may be less burdensome than taxation to effect the same objects, and certainly is so where the labourers subject to it would otherwise be idle. But the system becomes oppressive and economically wasteful when the burden falls on a busy population, and the service entails the removal of the labourer, especially for a lengthened period, from his own proper work. Generally speaking, a man's labour in his own fields and at his own direction is economically more valuable than the same labour applied to objects in which his interest is less direct and in which he is under official control. There is no doubt that where forced labour, even for indispensable public works, involves a considerable interruption of the natural course of industry, it is in the long run more costly than taxation to ensure the same purposes [see CORVÉE; PRESTATION].

F. A.

FORD, SIR EDWARD (1605-1670), proposed the issue of exchequer bills in *Experimented Proposals how the King may have Money to pay and maintain his Fleets with ease to his People*, etc., London, 1666, 8vo, reprinted in the *Harleian Misc.*, 1744 (vol. iv.) and 1808 (vol. vii. 8vo, and vol. iv. 4to). He also published *A Demonstration that Farthings are as necessary as bread for most of the People; And that Farthings of an intrinsic value are useless and deceitful*. n.d. and *A design for bringing a navigable river from Rickmansworth in Hertfordshire to St. Giles in the fields*, etc., London, 1641, 4to. Sir W. Roberts published in the same year an *Answer to Mr. Ford's book entitled a Designe*, etc. and both pamphlets were reprinted in 1720.

[Full details of Ford's life are given in the *Dictionary of National Biography*.] W. A. S. H.

FORECLOSURE. The extinguishment by the decree of a court of an equity of redemption (see EQUITY OF REDEMPTION). J. E. C. M.

FOREIGN DIVIDENDS is a term correlative to FOREIGN INVESTMENTS (q.v.). By a dividend something more than mere interest is implied: it may be held to cover some special risk as well as what are constructively earnings of management (cp. Professor Marshall's *Economics of Industry*, VI. vi. § 4 seq. on net and gross interest). Under "foreign," in this connection, we include every dividend earned by members of a community in places external to the community. We include the interest on private investments abroad as well as that on shares of public companies and government loans. In the case of England we should in-

clude dividends accruing from the colonies as well as those accruing from foreign countries. There is no country in which such dividends are so important as the United Kingdom. This fact goes a long way towards explaining our excess of imports (cp. article on COMMERCE). In 1891, when the excess of imports was £126,327,546, the amounts due to us from abroad were from £75,000,000 to £85,000,000.

A little consideration will show that all such dividends must eventually be paid by means of the importation of commodities. They are distributed by the agency of banks and financial houses, which are placed in funds by bills of exchange. The fact that importers have these bills to sell implies that they have to pay for commodities coming from abroad; or, to put it perhaps more accurately, parties abroad who have to pay interest on borrowed capital can only pay it by shipping bullion or commodities, and they use the ordinary methods of adjusting mercantile accounts. There is no real difference between the bill of exchange used for these payments and that used for settling ordinary debts between merchants. In the latter case the bills practically pass from importers to exporters or *vice versa*. In the case of dividend payments they pass from the importers to the bankers, as representative of the sources of invested capital. The actual payments are by commodities, of which bullion is only a small fraction. On an average of three years, ending with 1904, the annual importation of bullion and specie was £38,641,665, its exportation £37,220,425. The income from abroad, including payment of interest on foreign and colonial government securities for 1906-07 was £79,560,000. This is sufficient to prove our point.

In a book called *The Redemption of Labour* (C. B. Phipson), vol. ii., there is an attempt to distinguish between true and spurious dividends. The reasoning is undermined with fallacies, and the conclusions cannot be accepted. However, one point of some value is suggested, viz.: that the majority of payments received from abroad are raised by taxation and not earned as dividends proper,—a distinction which hardly concerns the receiving country; although there is no doubt that the objects of British colonial loans are more and more scrutinised as each issue is made, since there is a very definite sense amongst investors that productive expenditure of the loan is a guarantee of their dividends. C. A. H.

FOREIGN EXCHANGES, see EXCHANGES, FOREIGN.

FOREIGN INVESTMENTS. In this connection we use "foreign" in its original sense as meaning outside the territorial area which, for the time being, is under discussion. Probably few countries are without some investment of capital outside their own limits. We do not include capital taken out of the country by the

settler, which is his own property; that becomes part of the capital of the community to which it is transferred. The term indicates capital belonging to persons resident in any given territory but employed by other persons outside that territory; and it includes, of course, the acknowledgments for capital which has been so employed, and forms a debt from those who enjoyed its use to the lenders. Thus the debts of foreign states, as well as the capital of companies operating abroad, and capital lent by individuals to persons at work abroad, form the sum total of foreign investments.

No country in the world has such a mass of outside investments as the United Kingdom—whether in its own dependencies, or in foreign countries usually so called. The following table gives some idea of their amount:—

Colonial Government Securities . . .	£225,000,000
Foreign Stocks and Bonds . . .	525,000,000
Railways in British Possessions . . .	75,000,000
India . . .	65,000,000
" America . . .	120,500,000
" Foreign Countries . . .	127,500,000
Banks Operating Abroad . . .	50,000,000
Foreign Breweries . . .	3,500,000
Colonial and Foreign Corporation Stocks . . .	20,000,000
Gas Companies Operating Abroad . . .	6,500,000
Iron Companies Operating Abroad . . .	500,000
Land and Mortgage Companies . . .	100,000,000
Tea Companies . . .	2,500,000
Telegraph Companies . . .	10,000,000
Waterworks Companies Operating Abroad . . .	3,000,000
Tramway Companies Operating Abroad . . .	4,000,000
Mines—Colonial and Foreign . . .	30,000,000
Miscellaneous Companies—Colonial and Foreign . . .	30,000,000
Bank Deposits, say . . .	50,000,000
Private Investments . . .	250,000,000
Total . . .	<u>£1,698,000,000</u>

The amounts above given, except the last item, are arrived at from the stock exchange daily list (for January 1893, and ten years have not greatly altered the facts), by estimating what proportion of each class of security is held in this country. For this purpose the best expert information was sought. The proportion varies in several cases. About seven-eighths of the colonial stocks are held in Great Britain; of some foreign stocks hardly any, but on the whole range of those quoted in London it has been thought safe to estimate three-fourths as held here; of American railways, beyond the gold bonds, in spite of occasional bouts of speculation, but a small proportion is held in England, although more than we were at first inclined to think. As a general rule, it may be stated that from two-thirds to three-fourths of the other classes of securities quoted on the London stock exchange are held in this country. Only a small proportion

of bank deposits in the colonies and elsewhere is taken as belonging to this country; the greater part probably belongs to *bona fide* colonists or is not actually invested.

To private investments we have less guide. We know generally that large sums are invested in the management of estates and the conduct of businesses, and by way of mortgage and otherwise, throughout all the colonies as well as in foreign countries. Sir N. Lubbock estimates West Indian property held in England as worth now (1909) £12,000,000 to £15,000,000. Sir R. Giffen placed the foreign investments which escaped income tax in 1885 at £500,000,000. It is clear that this figure includes many public companies, but he speaks of "immense investment in private channels." It is highly probable that the amount is not less than the aggregate of banking deposits, land companies, and miscellaneous companies, and that half of Sir R. Giffen's figure, above quoted, is a very modest computation.

In his *Growth of Capital*, which we quote, Sir R. Giffen speaks of the foreign investments of Great Britain in 1885 as being £1,300,000,000, but his detailed estimate of the income of the nation derived from public sources abroad, above £85,000,000, implies a higher figure, for at fifteen years' purchase this would give nearly £1,300,000,000 for public investment alone, and twenty years' purchase is the rate he elsewhere adopts for capitalising this income. However, capitalising the £85,000,000 at fifteen years' purchase, and adding £200,000,000 for private investments, we should make the amount of foreign investments in 1885 to be over £1,475,000,000. Consequently our figure of £1,700,000,000 for 1892 may be considered moderate, showing an increase of only £225,000,000 in seven years. This figure gives the same annual rate of increase as that adopted by Sir R. Giffen in another part of his book, and we should have expected a higher proportionate rate.

Interesting statistics as to the growth of foreign indebtedness to England will be found in *Fenn on the Funds*. The editor states that between 1862 and 1872 the external borrowings of foreign states quadrupled, and that the mass of these loans was raised in London or Paris; and some index to the growth of the obligation is found in the capital amounts of foreign securities quoted in successive decades in the stock exchange, viz.:—

January 1862 . . .	£143,930,000
" 1872 . . .	600,000,000
" 1882 . . .	830,000,000

Similarly, Sir R. Giffen computes that from 1865 to 1875 miscellaneous foreign investments increased fourfold, and he makes the increase in those which pay income-tax between 1875 and 1885 at least £320,000,000, explain-

ing that, in the latter decade, the actual new issues of colonial and foreign government loans, municipal loans, and railways, amounted to £361,800,000. It is hardly wise to give more than such indications of growth. To approximate to an accurate proportion of the annual increase in the past it would be necessary to have figures for many years back made up exactly on the same principle. These hardly exist, except, perhaps, in Sir R. Giffen's hands, but we may accept, as a minimum, that some £80,000,000 a year are invested abroad.

In our estimate above, of course, no notice has been taken of lost capital, which has a very large place in the history of foreign investment. We have regarded only that which has at least the potentiality of a dividend. We reckon that it is fair to compute the interest at $4\frac{1}{2}$ per cent on the average. This would give an annual produce of £76,500,000, a figure which comes curiously near to the £75,000,000 assumed in the article on COMMERCE (*q.v.*) as the proportion of the excess of imports represented by the interest on capital invested abroad. (See also INVESTMENT.)

[See Giffen's *Growth of Capital*, 1889, pp. 26, 27, 40, 41 app.—Burdett's *Official Intelligencer*, iv. p. 13.—*Investor's Monthly Manual*, etc. Cp. a note at p. 99 of *Parly. Paper* 1761 of 1903.] C. A. H.

FOREIGN LABOUR. International migration of labour on a large scale is a marked characteristic of the present day. This movement was never contemplated by the older writers on political economy. Capital and labour alike were believed to be extremely tenacious of their native soil and averse to transplantation into foreign lands. But in our time capital and labour display a wonderful mobility, and the economic situation has in some instances been gravely affected by the transfer of vast bodies of producing agents from one country to another. The figures in the Report of the Royal Commission on Alien Immigration (1903) show how large an amount of labour is now migratory in character. By reason of the proportions it has attained, various states have of late taken steps to regulate the immigrant labour-market, and in some instances have imposed on it harsh and inhospitable restraints. The evidence contained in the Report above referred to and the mass of material collected by the Committee of the House of Lords on the Sweating System (cp. Blue-Book on Sweating System, 1888-89) supply much useful information regarding the amount of immigrant labour and its effect on domestic industry. See *Life and Labour of the People in London*, edited by the Rt. Hon. Charles Booth, 1904.

It is not proposed here to investigate the number of aliens that arrive in this country, as that subject will be more fitly considered under the head of IMMIGRATION (*q.v.*).

The better class of immigrant only crosses this country on the way to other lands. Large bodies of aliens arrive every year, for example, *en route* for America. But the poorest and worst type of foreigner remains here, either permanently or for a considerable period.

The trades which these foreign workmen chiefly undertake are baking, boot and shoe making, cabinetmaking, tailoring, and also such minor industries as cigar-making, fur-cap making, and ostrich-feather cleaning. Moreover, fifty thousand aliens—including lascars and Asiatics in the Indian trade—are said to be working in vessels that fly the British flag, and to be in demand as being more sober and amenable to discipline than Englishmen (Sir John Glover's paper, Statistical Society, March 1892, "Tonnage Statistics of the Decade 1880-1890"). A considerable number of Germans are engaged as domestic servants. To appreciate the economic situation, it will be necessary to see in what branches of the principal industries foreign and domestic labour come into contact.

Baking.—No trustworthy statistics exist at present regarding the number either of natives or aliens employed in the provinces, but in London the master bakers are estimated at three thousand, and the operatives at ten thousand or more, one half of the masters and fully that proportion of the men being Germans. The evidence given before the Royal Commission of Labour, Group C, 12th August 1892, showed that in many cases the foreign immigrant was boarded and 'lodged by a fellow-countryman and taught the trade, until, by thrift and perseverance, he himself became a small master. The better class of immigrant works in bakeries where "Vienna" bread is made, earns good wages, and holds aloof from trade societies. A lower type of alien supplies foreigners and Jews in East London, and often belongs to the Amalgamated Union of Bakers and Confectioners. Few foreigners, if any, compete in the wholesale business, nor does foreign competition seem to have seriously affected wages. Booth, 2nd series, vol. 3, ch. iii.

Boot and Shoe making.—In the boot and shoe trade of East London 25 per cent of those engaged are stated to be foreigners, and in number over ten thousand persons. No statistics are available as to the proportion of aliens now at work in other parts of the kingdom.

In the machine-sewn trade, the greater portion of what is known as "finishing" is in the metropolis monopolised by foreign workmen. For details see Mr. Booth's book above cited, vol. 4, ch. iv. Mr. David F. Schloss, an authority on the subject, maintains that the unskilled labour of the "sweated" Jews in the "finishing" department leads to a considerable increase of employment on the part of a large body of well-paid and skilled English workers.

The boot clickers and closers, for example, the tanners and others employed in the leather trade, are all Englishmen in receipt of fairly good wages and subject to reasonable hours of work.

In the class of goods known as "sew-rounds," i.e. fancy shoes and slippers, the better class of work is almost entirely in English hands, but the inferior work is made chiefly by Jewish work-people. Speaking generally it is alleged that, within the last ten or fifteen years, foreign Jews have gradually secured the commoner class of work in which native workmen generally learnt their trade. Further allegations are made in statements quoted in official publications and elsewhere, to the effect that we are being injured in our foreign markets by the stuff produced by this cheap labour, a great portion of it being made of cardboard and composition. The statistics of the exports of boots and shoes from this country do not, however, bear out this contention.

Cabinetmaking.—It is said that of 23,000 persons employed in this trade in London 4000 are foreigners. Here there can be little doubt that the pressure of foreign immigration has not yet become acute. Although the average wages earned by the alien are somewhat lower than those of domestic labour, yet he has not imported into this industry a standard of life or of work economically degrading (for details, cp. Booth, 1st series, vol. 4, p. 208 *seq.*).

Tailoring.—The ready-made clothing trade is very largely adopted by the immigrants, and Mr. Burnett, the labour correspondent of the Board of Trade, contemplates the time when this department will be entirely in their hands (cp. his Report on Sweating System, 1887). Eighteen or twenty thousand of them are stated by this authority to be employed in the manufacture of cheap clothing or "slops" in East London. Nor is the increase of foreign employment in the tailoring trade confined to London only; it is proceeding likewise in Birmingham, Leeds, Manchester, Newcastle-on-Tyne, and Glasgow. The majority of these aliens are Russian, German, or Polish Jews, working, for the most part, under a Jewish contractor. Conflicting views prevail as to the extent to which this trade has been invaded by foreigners, and, in the absence of any recent census returns, all statements on this head must be received with caution. There is also a conflict of opinion whether the immigrants engaged in the cheap clothing business compete with English labour or not, some competent observers alleging that they chiefly compete with one another, and that if they compete at all with native workers it is in a trade which they themselves have created. The best opinion seems to be that, as regards the supply of ready-made clothing to wholesale houses, the actual competition lies between the staff of the Jewish contractor and

domestic female labour employed in provincial factories. These factories, however, make little headway against the particular industry of "coat-making," a department of wholesale business which the Jewish operative practically monopolises. In this branch we find no contractors on a large scale, but a multitude of small masters who avail themselves of the necessities of the immigrant "greener"—as the alien is termed on his first arrival—to secure from him a day's work of indefinite duration at merely nominal wages. The social surroundings of these operatives are often deplorable, and the prices at which work is taken are constantly reduced by the fact that the alien hands have little desire or capacity for labour or trade combination, with a standard of life that admits of an enormous amount of toil under the worst possible conditions (cp. Booth's work, *supra*, 1st series, vol. 4, ch. iii.).

We have now cleared the ground for the consideration of the attitude of economists towards foreign labour. The subject naturally falls into two branches.

a. First, the competition between native workers and foreigners, who work for a fair wage, with abilities equal and a social status not inferior to those whom they displace.

b. Next we are confronted with cheap labour supplied by aliens, who arrive in a more or less impoverished condition, and whose standard of existence is very low.

As to the class of competitors under head a, there can be no objection consistently raised, from an economic point of view, by those who are in favour of commercial freedom. Mr. Fawcett, in his treatise on *Free Trade and Protection*, 3rd ed., deprecates any attempt to restrict this class of worker. Where no moral disadvantage can result from the settlement amongst us of such workmen, an employer would undoubtedly be justified in making use of their services. To interfere with the importation of such labour would be opposed to all the best instincts of free trade. Can any distinction be drawn economically between the competition of labour and the competition of the products of labour? Why should freedom to buy and sell be denied to those who have labour to dispose of? Moreover, the denial of such a right would injuriously affect not only the parties immediately concerned, but also the public who purchase the industrial product.

Again the foreigner is often engaged on account of his superior qualifications, and not only because he is willing to sell his services at a cheaper rate. Thus German scientific men are secured by some of our large manufacturers, and so are German clerks, owing to their linguistic attainments; while German bakers, whose knowledge of the processes of fermentation often exceeds that of Englishmen, readily find employment in English houses. Skilled

mechanics from France and Italy have invaded some of our textile industries. So far from any valid objection lying against the importation of such workers, it is probable that they give a distinct spur and impetus to the advance of education in this country.

As an exception, however, to the general rule of non-interference, take the instance of labourers imported under contract to perform certain services in a foreign country. Here it has been argued that the native workman is injuriously affected, because the immigrant may be ignorant of the conditions prevailing in the labour market he is about to enter. Advantage may be taken of his ignorance to extort terms unfair both to him and to domestic labour. The government of the United States has passed a law to prevent contracts of this nature being enforced. Such action must not be viewed as an attempt to restrict immigration, but as an endeavour to protect the alien against the consequences of his own heedlessness, and to provide that the native worker shall not thereby suffer loss.

Passing on to head *b*, what attitude should the economist assume towards any attempt to fetter the introduction of cheap labour? The advocates of *laissez-faire* base their attitude of non-intervention on the ground that "natural liberty" conduces best to the production of wealth. The business of the employer, they say, is to buy his labour in the cheapest market. If, by engaging Russian or Polish Jews, he lowers the cost of production, he ought to have full liberty to do so. Government should interfere as little as possible with the distribution of wealth resulting from free competition, because any such interference must tend to impair aggregate production more than it could increase the utility of the produce by a better distribution (cp. Sidgwick, *Principles of Political Economy*, 2nd ed. bk. iii. ch. ii., where this view of the question is stated). Enlightened self-interest on the part of the consumer will lead him to demand the commodities that are most useful to society, while self-interest will induce the producer to turn out these commodities at the least cost.

Setting aside for the moment the question of free competition and the alleged right of the consumer to secure at all hazards the cheapest article, a less sordid argument may be advanced in favour of non-interference with existing industrial conditions. The argument, it is true, only applies to one branch of trade, but it may be regarded as a representative one. A large section of the tailoring industry has, within the last thirty years, been transformed from a retail to a wholesale business. This transformation has rendered it impossible for the English journeyman tailor, apart altogether from the question of price, to compete with the contractor for orders from wholesale houses. The

organisers of Jewish labour in the metropolis are able to meet the demand of these houses—coming into competition, it is true, with provincial factories in certain directions, but, so far as the wholesale coat manufacture is concerned, supplying a want that under existing circumstances could not be otherwise satisfied. (Cp. Booth, 1st series, vol. 4, ch. iii.). In connection with this aspect of the case attention should be paid to the enormous volume of export trade in ready-made clothing that has gradually been developed under the present system. The total export of the country under the head of "apparel and slops" has doubled itself within the last twenty years, and as regards the port of London, is $2\frac{1}{2}$ times what it was. In 1868 the exports of these articles from the United Kingdom were £2,313,000, and from London only, £1,233,000. In 1888 the figures are: from the United Kingdom £4,658,000, from London only, £3,091,000. Now it may be taken for granted that, in default of her supply of cheap foreign labour, England, under prevailing industrial conditions, would be unable to keep up this export trade, and legislation by way of restriction upon immigration would simply have the result, to use the words of Mr. David F. Schloss, "of making a gift of our exports of 'slop' clothes to Germany, which already carries on a considerable foreign trade in these articles, and which, while her protective system excludes English material from the German market, would be only too ready to supplant us in all markets of the world by the substitution for English goods of garments made in Germany, by German cheap labour, and of German cloth." Is it better, in fine, to buy cheap clothes from the Continent or to make them here cheap, and export the surplus that you do not need? Unless you forbid both the entry of cheap goods and cheap labour you will be in a worse plight than now, for, if you only forbid cheap labour, you may throw the cheap goods trade into other hands.

Let us now examine the position from another standpoint, whether the free competition of cheap immigrant labour with native workers may not diminish the volume of that aggregate industrial production to which all economists rightly attach so much importance. Mr. Gunton discusses in *Wealth and Progress*, 1887, ch. viii., at some detail, the action of wages on productive power. His conclusions, which should perhaps for the present be accepted with reserve until the question is more thoroughly considered, are that high wages in the long-run mean cheap products and low wages dear products. That high wages conduce to large consumption and large consumption introduces a more extensive use of capital with improved methods of production, and as a consequence always reduces prices. In a com-

parative table that deals with Great Britain and the principal continental countries, Mr. Gunton shows that wages are 84 per cent higher, the use of steam 117 per cent greater, and the cost of productive power 37 per cent less in England than on the average in continental countries. Moreover, this writer contends that a considerable amount of the social advance noticeable in Great Britain is due to her short-time industrial policy, and he enforces this proposition by a further table showing that in England—despite of shorter hours of toil—the increase in the average wages has been greater than in any nation of the Continent. Should these conclusions be sound, they will go far to sustain objections that have been made against the influx of cheap labour on the ground of its tending to impair the productive power of the community. May not the economist condemn the foreign colony in our midst as forming a barrier against the advance of a more productive industrial system? (cp. Mr. David A. Wells, *Practical Economics*, New York, 1885). As an example of the way in which high-class machinery brings in its train high wages for operatives, reference is made by that writer to the action of certain English shoe-manufacturers, who have introduced American machinery, and who find that it pays them better to work these machines at wages which are at least double those paid to the shoemaker under the old hand-system. So also it appears that in Nottingham the introduction of more complex and costly machines for lace-making has, while economising labour, augmented wages to the extent of over 100 per cent.

From this aspect the influx of cheap foreign labour may be deemed to have had an evil effect in retarding the advent of more favourable conditions of production.

In justice to the impoverished immigrant, it is but fair to state that there is nothing definite to show that he tends directly to become a burden on the community. Even in Whitechapel—the portion of the metropolis where they chiefly reside—the number of aliens in receipt of parochial aid is infinitesimal. There is, however, evidence from certain localities, such as Hackney and Shoreditch, of an increase of pauperism due to the crowding out of English labour by foreign immigration. Moreover, the industrial position of the small Jew workshops tends to that irregularity of work which is by far the most serious trial under which the people of London suffer; for the smaller the capital involved, and the less the permanent fixed charge for working a business, the better suited is it for irregular employment. The man who engages only two or three others in a workshop or in his own house, as is frequently the case with the petty Jew master, can, if work fails, send them all adrift to pick up a precarious living, but a large factory cannot stop at all without serious loss.

In attempting to estimate the effect of the influx of needy aliens on the social and moral condition of domestic workers, the following points present themselves.

The evidence contained in the blue-books above referred to shows that a large proportion of the Russian and Polish immigrants are exceedingly poor when they reach this country. Their mode of life here is wretched in the extreme, their houses being in a most insanitary state and their food of a scanty nature. They are generally an inoffensive race, moral in their habits, and capable of hard work in spite of an inferior physique. They are very industrious, toiling for long hours at low wages, and maintaining existence on much less than an English workman. Such are their characteristics, and we find it stated by the committee of the House of Commons that, in those trades which they follow, there has been, in consequence of their competition, a marked fall in wages and a tendency to reduce still lower than at present the social and material condition of our own poor.

It is alleged, moreover, that the lowest class of alien labourer exhibits an incapacity for, or an aversion to, anything in the shape of trade organisation. His early training, his social surroundings and subservient position, render the German, Russian, or Polish Jew generally unfitted for free combination, and he forms a serious obstacle to the onward march of labour in the industries affected by his immigration. Now increased combination amongst the workers stands first among the needs of the time. Trades unions have undoubtedly put the English workman on a better footing as regards his employers. In many cases they have raised the standard of comfort and increased the efficiency of the labourer. And it is claimed for them that their moral effects have been as surprising as their economical. To all this these aliens are for the most part indifferent, and they constitute an inert mass that bars the progress of reform in the inferior grades of the trades concerned.

It should be stated, however, that recent efforts to organise the Jewish aliens at work in the boot trade have met with some success, and two Jewish branches of the National Union of Boot and Shoe Operatives, viz. the "London City" and "London East," are now established in the metropolis.

To sum up the situation regarding foreign labour in this country, we arrive at the following conclusions. That against the better class of workmen, who take fair wages and compete on an equal footing with domestic labour, no valid objection exists. That, as regards the wholesale coat-industry, it cannot be justly demurred to on the ground of its competing with native produce, but lies open to the reproach of barring the path of industrial

reform. That in the retail tailoring department the immigrants do injuriously affect the earnings of both English men and women. That in the lower class of boot and shoe making, the immigrants have appropriated work formerly executed by native operatives, but that it is open to doubt whether the aggregate domestic industry has suffered. That in cabinetmaking and the other minor trades in which they are found, the foreigners have not exercised any appreciable effect. Still there are grave objections from both an economic and social point of view to any large influx of impecunious aliens, with a low standard of living. This has found expression in the Aliens Immigration Act of 1905, designed to hinder the influx of undesirable foreigners.

[The bibliography of foreign labour is exceedingly scanty.

The evidence given before the Royal Commission on Labour (1891-92) and that contained in the blue-book on *Emigration and Immigration of Foreigners* (1888-89), and on *The Sweating System* 1888-89) will repay careful perusal.—In the Rt. Hon. Charles Booth's *Life and Labour of the People in London*, 1st series, 1904, the bearing of foreign labour upon certain trades is examined. Interesting details again are given in the *Report on the Sweating System*, 1887, compiled by Mr. Burnett.—Fawcett, in *Free Trade and Protection*, briefly alludes to imported labour, and so does Mr. Sidgwick in his *Principles of Political Economy*, pt. iii.—Mr. Gunton's *Wealth and Progress*, 1887, and Mr. David A. Wells's *Practical Economics*, New York, 1885, present many economic questions connected with the subject in a new light.

See also *Economic Journal*, vol. xv. p. 317. Report of the Royal Commission on Alien Immigration (1903), and Dilke, *Problems of Greater Britain*, (1900). For American views cp. Report of Bureau of Statistics of Labour for the State of New York (1885). Also Report of the Bureau of Industrial Statistics . . . for State of Pennsylvania (1884), part iii. Industrial Statistics, and First Biennial Report of the Bureau of Labour Statistics of California, 1883-84.

Alien Immigration. Reports to the Board of Trade on Alien Immigration, Burnett and Schloss [c. 7113], 1893.] S. N. F.

FOREIGN LAW IN ENGLISH COURTS.

There are many occasions on which English courts have to consider foreign law. This may occur with reference (1) to questions of personal status; (2) to contracts; (3) to questions as to the devolution of property after death; (4) to questions relating to real property situate outside of England.

(1) Questions as to personal status (legitimacy, majority, guardianship, marriage and divorce) depend upon the DOMICILE (*q.v.*) of the person concerned, but this is subject to the condition that the "status" described in a certain way in a foreign country is really the same as the "status" described in the same way in England. Thus "a marriage which is not that of one

man and one woman, to the exclusion of all others, though it may pass by the name of a marriage, is not the status which the English law contemplates when dealing with the subject of marriage" (Sir Charles Butt in *Brinkley v. Attorney-General*, 15 Probate Division, on p. 79).

(2) The question what law governs a contract is frequently one of great difficulty. The general rule is that the law of the place where the contract is made ought to prevail in the absence of circumstances indicating a different intention (in *re Missouri Steamship Co.*, 42 Ch. D. 321-326). As regards contracts of affreightment the well-known case of *Lloyd v. Guibert* (L. R. L. and B. 115) has established the rule that any questions relating to sea damage and its incidents are, subject to any contrary agreement between the parties, governed by the law of the country to which the ship belongs (see *The August* [91] Probate, 328).

(3) The devolution of personal property on death is regulated by the law of the testator's or intestate's DOMICILE (*q.v.*) at the time of his death; on the other hand the devolution of real property is regulated by the law of the country in which it is situate. Thus an English court, in dealing with the personal property left by a domiciled Scotchman, will have to consider the claims of his wife and children before having regard to the dispositions made by his will, as, according to Scotch law, these rights to a share of the residuary estate cannot be defeated by any testamentary dispositions.

(4) The law of the country where real property is situate must be considered in any questions as to priorities of mortgages, transmutation of possession, and rights of execution creditors. English courts have of course no direct jurisdiction as to foreign land, but by their control over the person of a defendant residing within the jurisdiction, they may indirectly obtain the same results as would have been obtained directly by a judgment affecting the land (*Penn v. Lord Baltimore*, i. Vesey, sr. 444). When an English court has to decide any point according to foreign law, "the opinions of experts who in their profession are acquainted with such law are the only admissible evidence thereof" (Stephen, *Digest of the Law of Evidence*, art. 49). It should be borne in mind that the provisions of the foreign law are considered with the sole object of ascertaining the mutual rights of the parties, but that as regards the remedies for the enforcement of such rights English law must always prevail, *e.g.* a contract for personal services could according to some systems of foreign law be specifically enforced, but nothing beyond damages could be obtained in an English court in respect of such a contract. It must also be pointed out that an English court "will

not enforce a contract against the public policy of this country, wherever it may be made" (Rousillon v. Rousillon, 14 Ch. D. 351, 369). For this reason a contract in restraint of trade, though it may be governed by French law and be valid according to French law, will, if void according to English law, not be enforced by an English court (see RESTRAINT OF TRADE).

[Von Bar, *International Law*, translated by Gillespie, 2nd ed. 1892.—Foote, *Private International Jurisprudence*, 3rd ed. 1904.—Westlake, *International Law*, 4th ed. 1905.—Dicey, *Conflict of Laws*, 1896.—Nelson, *Cases in Private International Law*, 1889.] E. S.

FOREIGN TRADE, REGULATIONS OF. See TRADE, FOREIGN REGULATIONS OF.

FOREIGN TRADERS AND THEIR RIGHTS.—In England, as in all countries in the middle ages, the position of the foreign trader landing on her shores was precarious. As a stranger he had no rights in the view of the ordinary law of the country unless specially protected by royal license. Such licenses were granted in some cases to individuals, in others to the subjects of certain sovereigns or the inhabitants of certain cities or countries. Of the former nature was the general treaty entered into by Offa and Charles the Great (797) providing that the subjects of each should be held worthy of justice. Still later we find licenses granted with the apparent desire of encouraging foreign merchants, and even of foreign settlers. Thus John granted foreign merchants protection in coming and going both for themselves and for their wares, while among the provisions of the Magna Carta there are two (cc. 41, 42), which deal with their safe conduct and their necessary freedom from *mala tolla*. Under Henry I. colonies of Flemish weavers appear to have been settled in different parts of the land. Toward the end of the 11th and beginning of the 12th centuries two definite policies with reference to the treatment of foreign merchants had gradually developed themselves. The king and the nobles on the one hand saw that it was to the advantage of the kingdom to be brought into connection with the industries and activities of foreign nations. It is possible that they were assisted to the perception of this by the benefits obviously accruing to themselves. On the other hand the English traders resented the intrusion of their foreign rivals within the country. As a matter of fact at one time much of the internal trade of the country seemed likely to slip out of native and into foreign hands. As the towns grew in size and power it was only natural that these views should find more forcible expression. During the struggle between Henry III. and Simon de Montfort, the cause of the towns was warmly espoused by the latter, who, seeing farther into the future, urged that the nation should strive to make itself self-supporting by wearing cloth wrought

within the country, and staying its exports of wool to Flanders. After the victory of the royalists the towns suffered a period of reverse.

During this period, extending with intermissions from 1272 to 1376, the foreign trader was treated with all possible consideration and even encouragement. The period may be divided into two parts, during the earlier of which (viz. in the reign of Edward I.) foreign traders were encouraged without any particular attempt being made to encourage the trade and industry of the country itself. No doubt Edward was partly actuated by hostility to the towns, and especially to London, on account of the opposition encountered from them both by his father and himself. Their complaints and requests were alike set aside. Their main demands were these (1) That the foreign traders should dwell in the house of a citizen. (2) That retail trade should be prohibited to them. (3) That their term of residence should be limited to forty days. These points, except the last, were refused by Edward I., who definitely supported the foreigners and assured them security. The *Carta Mercatoria* (1303) is practically a judgment in favour of the foreign traders on all counts. During the weak rule of Edward II. the towns were able to reassert themselves and to obtain the acknowledgment of their claims. But when Edward III. began his effective reign the position changed. During this, the second, part of the period referred to, security and free rights etc. are guaranteed to the foreigners, but at the same time the policy of the king in encouraging home industry by prohibition on the export of wool and the import of foreign cloth, and by the settlement of foreign weavers in England who might instruct the English by their skill and example, averted the evil consequences which had seemed likely to ensue from the position which the foreign merchants had held and endeavoured to retain. England was ceasing to be merely a buyer of foreign goods and a source of supply for the wool required in foreign industries.

With the next period (1376-1461) a reaction in favour of the exclusive policy of the towns set in. In 1376 Edward III. made his peace with them by virtually affirming their demands in the points mentioned above, a course in which he is followed by his successors. The Lancastrians could ill afford to alienate popular support. In addition to legislation (as for instance 18 H. VI. c. 4) in the directions indicated, they added one provision of great interest in view of the later trade policy. Under Henry IV. (5 H. IV. c. 7), it was ordained that merchant strangers must spend what they obtain from the sale of the goods they bring on English goods of export. They are to export wares and not gold. Under Henry VI. (18 H. VI. c. 4) the foreign merchant was compelled to reside with an official host, who

was responsible for his employing his receipts in purchasing English commodities. (Jones, *Pol. Econ.*, ed. Whewell, p. 310.)

Gradually much of the legislation with regard to merchant strangers became obsolete in practice. It was frequently re-enacted but difficult to maintain. The real danger against which it was aimed had passed by. Not only had English industry become strong but the enterprises of the staplers and the merchant adventurers (see ADVENTURERS, MERCHANTS; STAPLE) had enabled the English to carry the war, as it were, into the country of the foreigners. They were pressing on to take their rightful share in the commerce of the world. From these and other causes the struggle of the later period under Richard III. and the early Tudors is not so much a struggle against the foreign trade in the more strict sense of the word, but against the intrusion of the stranger into the domain of industry.

[Schanz, *Engl. Handelspolitik*.—Macpherson, *Annals of Commerce*;—*Statutes at Large*.—Rymer's *Fœdera*.] E. C. K. G.

FORESHORE. That part of the shore which lies between ordinary and low water mark, that is to say, between high and low water mark at the time of neap tide. Till the reign of Queen Elizabeth no distinction seems to have been made between foreshore and seashore above high-water mark. About 1568 a certain Thomas Digges wrote a treatise entitled *Proof of the Queen's Interest in lands left by the Sea and the salt shores thereof*, in which he maintained the crown's right, in virtue of the royal prerogative, to all the foreshore; a right which could not be alienated except by express grant. On this theory the crown lawyers acted till the beginning of the 18th century, when the claims of the crown were gradually allowed to die. They were revived in 1830, when Hall published his *Essay on the rights of the Crown and the Privileges of the Subject in the Seashores of the Realm*. The law at present seems to be that foreshore may be parcel of an estate or manor, that title to it may be shown by prescription, and that possession or enjoyment for sixty years displaces whatever rights the crown may have.

[S. A. Moore, *History and Law of the Foreshore and Seashore*, London, 1888.] A. E. S.

FORESTALL. In the stock-exchange sense this verb, which is practically obsolete and is seldom used, is almost synonymous with the verb to bull, meaning the act of speculation for the rise. A speculator, or band of speculators, may foresee a rise in the price of certain securities or commodities. The operation begins by the quiet buying up of such securities or commodities in order to forestall the rise which is expected to take place, in consequence of the buying of the operators, backed up or not, as the case may be, by favouring events. A forestaller in this sense is simply a **BULL** (*q.v.*),

but opinion is divided as to the fairness of his operations.

A. E.

FORESTALLERS AND REGRATORS. Together with regrating and engrossing, this signified the undue intervention of a middleman between the producer and consumer. Fore-stallers, regrators, and engrossers were viewed with disfavour, and their practices prohibited, because they were regarded as raising the price of commodities without adding to their value. In the act of 1551-52 (5 & 6 Edw. VI.), they are defined in the following terms: forestallers as "persons buying goods or victuals on their way to a market or port, or contracting to buy the same before actually brought for sale, or endeavouring by these or other means to enhance the price or prevent the supply"; regrators as "persons buying corn or other victuals, and reselling the same in the same market-place or in any other fair or market within four miles"; engrossers as "any buying corn growing, or any other corn, grain, butter, cheese, fish, or other dead victual, with intent to resell the same again." With regard to the foregoing definitions, the last names while describing the practice of the time, incorrectly restricts, so far as earlier times were concerned, the action of the engrosser to dealing with certain commodities. Regrating must be taken as the complete action embracing both forestalling and engrossing, which were particular stages in the action; but it is doubtful if any very definite discrimination was shown so far as the 13th and 14th centuries, in the use of the three terms. The practice they signify was condemned both because it might lead to monopoly, which was combated in its many forms, and because it resulted in unrighteous gains and enhancement of price. E. C. K. G.

Numerous English, Scotch, and Irish statutes have imposed heavy punishments on these offences, partly generally, partly in so far as they affect particular commodities (victuals, wines, cattle, butter and cheese, etc.), one of the earliest being the Statute of the Pillory of Henry III. (51 Hen. III. § 6—A.D. 1266), but they did not prove effectual, and some of the later English acts were, in 1772, repealed by 12 Geo. III. c. 71. As the older acts remained in force, and the judges, moreover, held that forestalling was an offence at common law as well as by statute, prosecutions continued down to 1800, in which year a person who, in the corn-market, bought wheat at 41s. and resold it to another dealer at 43s., was tried before Lord Kenyon and a jury (*R. v. Rusby*—Peake, Additional Nisi Prius Cases, 189). The judge refers to Adam Smith's observations on the subject, and holds that if that author "had lived to hear the evidence of to-day" he "would have seen whether such an offence exists and whether it is to be dreaded." It appears, however, that already in that case the judges were divided in opinion, and that no subsequent prosecutions took place. In 1844

"the offences of forestalling, regrating, and engrossing" were abolished by 7 & 8 Vict. c. 24, and cannot now form the subject of a prosecution in any part of the United Kingdom.

[*Statutes of the Realm*.—Macpherson, *Annals*.—Account of practice in Ashley's *Economic History*.—Cunningham, *Growth of English Industry and Commerce*.—Girdler, *Observs. on Forestalling, Regrating, and Ingrossing* (1800).—Dugald Stewart, *Political Economy*.—Stephen, *History of the Criminal Law*, iii. p. 200, and for a list of the repealed statutes, see 7 & 8 Vict. c. 24, § 2.] E. S.

FORESTS.

Forests have influenced the economic condition of countries and of their inhabitants in such widely different manners that it is desirable to indicate some of the leading branches of this subject.

As the hunting-grounds of monarchs and great nobles they were, during early and mediæval times, the occasion of severe and oppressive laws which lingered long in Europe, and vestiges of which may even now be traced at the present time. The article on FORESTS, MÆDIEVAL, describes this part of the subject.

On the other hand the influence of forests on the climate of a country is very great. The article on FORESTS, ECONOMIC ASPECTS OF, deals with this part of the question.

Forests, whether on hills or plains, are believed to promote the deposition of moisture from the atmosphere; and they are certainly most beneficial in preventing the rapid evaporation of what is deposited. Vast areas of the globe, in both tropical and temperate zones, have been rendered more or less sterile through the destruction of these forests, being hence exposed to destructive floods in the rainy season and to excessive droughts in the dry.

As an illustration of this, reference may be made to the remarks of Gibbon (*Decline and Fall*, vol. i.) on the extent of woodland in Germany, temp. Cæsar and Tacitus, and its striking effect on the climate, which supported reindeer and elks. He draws an ingenious analogy with Canada on the same parallels as London but icebound and forest-covered, and argues that clearing the soil will enable the sun to penetrate it and fertilise it.

FORESTS, MÆDIEVAL (English forests as typical of mediæval forests generally).

The DIALOGUS DE SCACCARIO (i. 12) defines the king's forest as "a safe mansion for wild beasts; not of any sort, but bred in the woods; not in any places, but particular and proper ones for this purpose; whence it is called forest, by changing the letter E into O, as *ferest*: that is, a station for wild beasts." The king has not a forest in every county, but "only in the wooded ones, where there are the best coverts and most fertile feedings for the beasts: neither does it matter to whom the woods belong, whether to the king or the nobles of the kingdom; for the beasts are at their liberty to range uncontrolled over every part of them" (ed. Madox, p. 29).

According to Manwood, there are four chief properties of a forest—vert, venison, particular laws, and proper officers, but he quotes Coke as giving eight—soil, covert, laws, courts, judges, officers, game, bounds (4 *Inst.* 289).

Forest Courts. Under the Norman kings these seem to have been held by the foresters or keepers. In later times there were three forest courts, the court of Attachments, the Swanimote, and the Justice Seat.

I. *The Court of Attachments* is so called because it was held *ad videndum attachiamenta*. The Charter of the Forest (1217) provided that it should be held every forty days, and therefore it is sometimes called the Forty Days' Court. Before the charter, it was held very often at the will of the chief forest officers, and was called the Woodmote, in Shropshire, the Woodplea Court. At this court, which only dealt with injuries to vert or venison, the foresters brought attachments to the verderers who enrolled them. Cases were also referred from this court to the Swanimote.

Attachments in the Forest were of three kinds.

1. By goods and chattels. 2. By the body with pledges and mainprise. 3. By the body without pledges.

II. *The Swanimote.* The pleas in this court were called pleas of the forest, and the verderers were the proper judges. Before the Charter of the Forest the chief wardens and foresters held it at any time, and oppressed the people greatly by compelling them to attend it. By the Charter of the Forest (c. 8) it was to be held only three times in the year. 1. Fifteen days before Michaelmas, when the agistors of the king's woods met to take agistments. 2. About St. Martin's Day in winter, when they received PANNAGE. In these two courts only the foresters, verderers, and agistors had jurisdiction. 3. Fifteen days before St. John Baptist's Day, when the agistors met to fawn the deer. The foresters and verderers only had jurisdiction in this court. But by the Ordinance of the Forest, 1 (34 Edw. I.), presentments of offences in vert and venison were to be made at the next Swanimote before the foresters, verderers, regards, agistors, and other forest officers. In early times it appears that all freeholders living in the forest, and the four men and reeve of every village, had to be present to hold inquisitions and serve on juries on pain of amercement by the chief warden. Among the offences inquired into at this court, besides offences in vert and venison, were those of narrowing church-ways in the forest, digging for mines without licence, extortions by forest officers. The regards presented what mastiffs were kept in the forest unexpedited. Offenders indicted in the Swanimote in the words, "Quod sunt communes malefactores de venatione Domini Regis in foresta," might be outlawed.

III. *The Justice Seat* was held every third year (4 *Inst.* 291), after forty days' notice by the sheriff's proclamation. A jury of twenty-four, twenty, or eighteen was chosen from the freeholders and others in court, and the rolls of offences, sealed with the verderer's seal at the Court of Attachments and Swanimote, were presented.

Forest Officers.—Besides the *Custos totius Forestæ* (mentioned Stat. 1 Edw. III. cap. 3) and

the *Supervisor Forestariorum*, there were six classes of forest officers,—stewards, verderers, foresters, regards, agistors, woodwards. No one could hold more than one office at a time. By the Ordinance of the Forest, 34 Edw. I. c. 3 (1306), forest officers were exempt from attending assizes, juries, and inquests, without the forest.

Verderers were judicial officers of the king's forest chosen *in pleno comitatu* by his writ to the sheriff *de viridario eligendo*, and sworn. They were judges in the Swanimote, and directors of the other forest officers. They reviewed and enrolled attachments and presentments of trespass in vert and venison, and held inquisitions "by the four townships nearest to the forest" (Assize of the Forest, art. 7). The verderers, of whom there were usually four, were esquires or men of good estate.

Foresters were officers sworn to preserve vert and venison. They attached offenders and presented them at the forest courts. Foresters were appointed by the king's letters patent and held office sometimes for life, sometimes during pleasure. In some cases they paid fee-farm rents to the king, and a man might be a forester in fee *in jure usoris*. That a woman might be a forester, but had to appoint a deputy, is shown by the sheriff's return to a writ of summons to the Justice Seat in Pickering Forest 8 Edw. III. (4 *Inst.* 310). Foresters might pursue offenders with fresh pursuit within their view out of the forest, but might not wound, beat, or kill them there as in some cases it was lawful (Stat. 21 Edw. I. of trespassers in parks, etc.) for them to do within the forest. They had the right of topping trees in another man's ground for browse (Assize of Pickering, 8 Edw. III., fo. 19). Those holding land in the forest paid yearly to the foresters at their scotale 5s. or one sheep or lamb, and when the forest and officers had been in existence time out of mind, the foresters were entitled by prescription to 1½d. a day, or to all windfall wood, shoulders and skin of deer, etc. They could neither hawk nor hunt nor license others to do so. Every forester had to appear at the Justice Seat and present his horn on his knees to the chief justice in eyre, who delivered it to the marshal. It was returned to the forester on payment of a fine of 6s. 8d.

Regards were instituted by the Assize of the Forest, (c. 4) 1184. They were twelve knights who viewed and inquired into offences in vert and venison, concealments and defaults of other forest officers. They were appointed (1) by the king's letters patent or by the justice in eyre, for life, or in fee (4 *Inst.* 291). (2) On the king's writ to the sheriff to summon a *regard* of the forest. Vacancies by death were filled by the sheriff's election in the county court. In this case the office was held during the king's pleasure. (3) The chief justice in eyre appointed a substitute for a regard to attend the Swanimote, *pro hac vice tantum*. It was necessary thus to keep up the number because the twelve had to agree concerning offences.

Regards, formerly called *visitatio memorum*, were held once in three years without a new writ, by regards, foresters, and woodwards (Assize of the Forest, c. 10). The regards appointed as

many foresters for this as they thought fit. They surveyed wastes, assarts, and purprestures, and entered them on a roll. This they brought to the Court of Attachments on the Swanimote, when it was sealed and signed and was presented at the next Justice Seat. Woods within the forest metes but not part of the forest were out of regard.

Agistors were four officers appointed by letters patent. They took the beasts to pasture in the forest, presented trespasses done by cattle, looked after the demesne woods and lands enclosed, and received the cattle and payments of those living in the forest who had common in the unenclosed ground there. The king's demesne woods and lands were agisted by his foresters, verderers, and agistors, who met at the Swanimotes for this purpose, and to receive the money (Charter of the Forest, c. 8). The verderers' rolls of the Swanimote, on which the foresters' and verderers' agistments were enrolled, was the king's record to charge the agistors with the receipt, and they alone were answerable for it. (Assize of Pickering, 8 Edw. III., fo. 7, 8, 9.) They brought to the Justice Seat an account of the money received for pannage. The agistors, foresters, and verderers certified the chief justice in eyre when it was time to agist the king's demesne woods and lands, and he directed a commission to them to be returned at the next Justice Seat.

Agistment is the pasture or herbage of any ground, or the money taken for it. It is of two kinds. (1) Herbage—of woods, lands, and pastures. (2) Pannage—of woods alone, i.e. the mast of trees. The time of agistment in the king's demesne woods and lands for herbage, for commonable beasts, was from the Swanimote fifteen days before St. John the Baptist's Day until Holy Rood Day (14th September). (Charter of the Forest, c. 8). This was the fence month. The agistment for pannage, which might be for beasts not commonable (swine and hogs), lasted for forty days from the Swanimote fifteen days before Michaelmas until about St. Martin's Day.

Woodwards were officers who had the care of the woods and vert and presented offences at the Court of Attachments. If a subject had wood in the forest and his woodward did not appear at the justice seat to present his hatchet to the chief justice, his wood was seized to the king until he replevied it and paid a fine. If not replevied in a year, it remained in the king's hands for ever. An owner who appointed a woodward where there was not one before was fineable (Assize of Pickering, 8 Edw. III. fo. 8).

Assart, Purpresture, and Waste:

Assart. To assart "is to destroy any covert by the rooting it up and to make it plain ground" (Manwood). The word comes from the French *assartir* (*essarter*, *Coke*) or from the Latin *cauro*, or possibly from *ad sero*, it being sometimes spelt *assertare*. The *Dialogus de Scaccario* (l. 13) says, "What you find called *occasione* by Isidorus are generally said to be *estrepement*; that is, when the woods and brambles of the forest are occasionally cut down for food and coverts; after the cutting down of which, and the roots pulled up, the land is turned up and cultivated. But if the woods were cut down in such a manner

that scarcely the stock of an oak, or any other tree, remained standing in those parts where they had been cutting, and five could be found cut down together in one place, they looked upon it as waste" (Madox, p. 29). Forest land might not be assarted without the king's warrant, and land thus wrongfully assarted was seized into the king's hands and was redeemable by a fine. If this was not paid by the owner or his heir, the king continued to hold the land for ever. The fine for assarting was not fixed by the forest laws, but was levied at the discretion of the king or chief justice in eyre, usually according to the number and value of the acres assarted. A man found making assart or purpresture, if in the king's woods, was committed for the first offence without bail until he paid the fine to the king, if in the woods of a subject, he was bailable for the two first offences (see *State of Realm*, i. 243).

Restold, sheriff of Oxfordshire, in the reign of Henry I. owed seven pounds ten shillings "for the king's woods, which are so destroyed that no village can pay the farm for them." Robert, Earl of Leicester, "once on the eve of a visitation of the woods, generally called a survey, made every three years, procured the king's writ to be free from those sums of money that were demanded out of his land for waste, putting in the number arising out of them, which, being carried and read in public at the exchequer, all were amazed and astonished, saying does not this earl weaken our liberty" (*Dialogus*, i. 2; Madox, p. 28). Whole counties are found in the Pipe Rolls, *in misericordia pro foresta*. Wood rents paid for forest land, converted by the king's license into pasture, were not included in the farm of the crown lands on account of the fluctuation in their value.

Purpresture is thus described by the *Dialogus* (ii. 10): "It sometimes happens through the sheriff's negligence, or his officers', or by a long continuance of war, whereby those who lived near the estates appropriated to the crown, usurped part of them, and annexed them to their own possessions. But when the itinerant justices, by the oath of lawful men, discovered them, they rated them separately from the ferme of the county, and delivered them to the sheriff to be answered for separately; and these are called purprestures or seizures; which, when they are discovered, are taken as was said, from the possessors of them, and hence fall to the treasury. But if he from whom the seizure is taken committed the fact, he shall at the same time be punished by a very heavy fine, unless the king thinks proper to forgive it him; if he did not commit the fact, but is his heir, the recalling of the estate is held sufficient punishment" (Madox, p. 45). No man might enclose any ground in the forest to the hurt of the deer, and if he had a license to enclose he might not do it with a high hedge and ditch or a high paling, for this was against the Assize of the Forest (c. 10). A man might not build a house on his own free land in the forest without license, and a house so built was to be pulled down before a certain day, or a yearly rent paid to the king for it (Assize of Lancaster, 12 Edw. III., fo. 6). By the Assize of Clarendon c. 7 (1166) gaols might be built out of the king's woods.

Waste. "To fell or cut down any woods which grow scattering, or any thick covert in the forest, though on a man's own inheritance, yet if done without license of the chief justice in eyre, or view of the foresters, 'tis waste" (Manwood).

The wood or place wasted was seized into the king's hand until the owner or his heir paid a fine assessed by the chief justice in eyre according to the number and value of the acres wasted (Assize of Pickering, 8 Edw. III., fol. 22).

Purview was certain territory, adjoining the forest, bounded with unmovable boundaries and known by matter of record only. It was once forest-land and disafforested by the perambulations made in 1218.

Forest Beasts. A forest was not a privileged place for all wild beasts and fowls, but only for those of the forest, chase, and warren. The beasts of the forest were, the hart, hind, and hare, and later, the boar and the wolf. But wolves were almost destroyed by Edgar, and no care was afterwards taken to preserve them. As late as Edward I.'s time there were many wolves in England, for, in 1281, Peter Corbet was commissioned to destroy them in Gloucestershire, Worcestershire, Herefordshire, Shropshire, and Staffordshire: "Lupos cum hominibus, canibus, et ingeniis suis capiat et destruat modis omnibus quibus viderit expedire" (Rymer, i. 591).

Beasts of the chase were the buck, doe, and fox, and formerly the marten and roe. Those of the warren were the hare, cony, pheasant, and partridge. The difference between beasts of the forest and of the chase is that forest beasts frequent woods and coverts, and those of the chase are field beasts. Each had its season, and there are many interesting terms in this connection.

The so-called laws of Canute established the king's right to have forest "wherever I shall wish to have it." From this time until the granting of the Forest Charter in 1217, the king issued a commission under the great seal declaring his will to make a forest in any place, and commanding that a perambulation be made. When this is returned and certified the king is entitled to the forest by matter of record. A writ was then issued to the sheriff commanding him to proclaim through the county that the king had appointed such ground to be a forest, and that no one might hunt there after a certain day. But this made it only a chase until the king appointed the officers.

Strictly speaking, only the king could hold a forest, because he alone had power to appoint a justice in eyre of the forest. Forests were granted to subjects by letters patent, and all the officers remained except the justice in eyre.

A *Park* equally with a chase is a place of privilege for wild beasts of venery, and also for other wild beasts that are beasts of the forest and of the chase. It must be enclosed, and if open might be seized into the king's hands as a free chase. Parks were held by subjects by license to impark. The monastery of St. Albans appears to have had a park in the vill adjoining. (Dom. i. 135 b.) Domesday mentions sixteen subjects who held parks. From the time of Edward I. most great men had parks and chases, and the Patent Rolls contain many licenses to impark.

A *Chase* is a harbour for wild beasts, usually smaller than a forest and not having so many liberties, and larger and with a greater diversity of beasts than a park. The officers were keepers and woodwards. A chase differs from a forest in

that it may be in the hands of a subject, and from a park in that it is not enclosed.

A *Warren* is a franchise or place privileged either by prescription or by a grant from the king to keep beasts and fowls of warren. A free warren cannot be seized, though unenclosed.

Offenders in parks, chases, and warrens were punishable at common law, and by stat. 21 Edw. III. *De Malefactoribus in parais et chaceis*, etc.

Haia is a hedge, sometimes a park or enclosure. Beasts were caught by driving them into a hedged or paled part of a wood or forest called a *haia*. The *haia*s mentioned in Domesday were chiefly in Worcestershire, Herefordshire, Shropshire, and Cheshire. They occur in the Pipe Rolls as royal preserves. Edward III. had a chapel in his *haia* of Kingesle.

Names and Extent.—The woods mentioned in Saxon charters are mostly very small and are only in a few counties, but in early Saxon times the whole country between Tyne and Tees was a vast forest, the home of wild beasts. Only four forests are mentioned as such in Domesday besides the New Forest. These are Windsor Forest in Berkshire, Gravelines Forest in Wiltshire, Winburne Forest in Dorsetshire, and Huheuode or Whichwood Forest in Oxfordshire. Neither Middlesex nor Essex forests are mentioned, though they must have existed, but *Forestarius de silva regis* occurs under Writtle in Essex (ii. 5 b). There are evident notices of forest land in Worcestershire, a forest is alluded to under Langebridge Hundred, Gloucestershire, and another in Herefordshire, but not by name (i. 179 b. 181, 184, 186). The forest of Dean is evidently alluded to under Dene (i. 167 b.), and under the lands of William de Ow in Wigheite, Gloucestershire occurs this entry: "*Alestan tenuit T. R. E. nunc est jussu Regis in foresta sua.*" In making the New Forest, William I. afforested portions of manors which were already woods. At least 17,000 acres were afforested in Hampshire between the reign of Edward the Confessor and the Domesday survey. Most of this land appears to have been on the borders of an older forest called by several writers *Ytene*. Names of parts of the forest ending in "*ham*," "*ton*," and "*tune*" show that they were sites of manors or villages. The royal demesnes in the reign of William I. are usually said to have consisted of 1422 manors, 30 chases, 781 parks, and 67 forests, but this is probably inaccurate (Stubbs, i. 403). From a passage in Abingdon cartulary, William seems to have extended the limits of Windsor Forest by four hides from Winckefeld towards Wildeshoram. Forests were probably at their greatest extent in John's reign, and until this time the whole of Cornwall, one of the least wooded counties, was under forest laws. The whole of Essex seems to have been afforested by John (Rot. de Oblatis, p. 102). The largest forest in England began to be destroyed when ironworks were established on a large scale in Sussex in the thirteenth century. Coke says that the newest forest in England is Hampton Court forest, made by act of parliament 31 Henry VIII. c. 5 (4 *Inst.* 301).

The forests of England are contemporary with

the royal demesne, and both are supposed to have had their origin in the folc-land, but this view is rather shaken by the recent researches of Professor Vinogradoff (*Eng. Hist. Rev.* viij. 1). Gradually, as the king became looked on as more fully representative of the nation, the folc-land disappeared before the *terra regis* which we find in Domesday. The forests, a source of pleasure as well as of wealth, were considered as especially a royal possession. Among the Anglo-Saxons there were two chases, the higher reserved for the king, and the lower enjoyed by the holder of the land.

A great industry of the Anglo-Saxons was keeping pigs, and woodland was very valuable not only for deer, for fuel, and for wood for building, but chiefly for the support of pigs. A "*wood of so many pigs*," is a frequent entry in Domesday. In Ine's laws (A.D. 690) the worth of a tree is estimated by the number of swine that can stand under it. These laws forbade the felling and burning of trees, and imposed a fine of 60s. for burning a log in a wood, lest in this way woods should be destroyed. By Cnut's laws, cutting brushwood in the king's forest is forbidden, and the fine for destroying a tree which the beasts eat is 20s. Even in Henry I.'s time, Herbert Losinga, Bishop of Norwich, refused to give fuel from a wood at Thorpe to the sick, and preferred to give money, saying, "*Tu vero custodi sylvam sanctæ Trinitatis sicut vis custodiri a sancta Trinitate*" (Epis. viij.). Forests were sometimes waste land, *terra non lucrabilis*, often mentioned in the Pipe Rolls, and the preservation of game included, besides deer, boars, wolves, otters, and water-fowl, the fishing of rivers and coursing in great plains. An ancient privilege of the citizens of London confirmed by charter of Henry I. was coursing in Middlesex, Wiltshire and Surrey. In the so-called laws of Edward the Confessor, now known to be dated about 1217 (Liebermann, *Leges Anglorum*), public as well as royal rights were protected; any one claiming a private fishery or preserve for wild fowl without royal charter was fined by the jurors of the hundred, and a mill or weir made on a river was removed and the trespasser fined. The fence of the great rivers was removed by Magna Carta, cc. 47. By the forest laws attributed to Cnut, which are now known to be forgeries (Stubbs, *Select Charters*, 156; Liebermann, *Instaura Cnuti*, ed. R. Hist. Soc., p. 90), four thanes were appointed in every province to administer justice, and received a yearly salary of two hundred silver shillings. Under them were four inferior thanes (*lesthegenes*) who had the care of vert and venison, at a salary of sixty silver shillings, and under each of these were two men who watched at night and did the more servile work, receiving fifteen silver shillings yearly. They were all provided with horses and arms. Those of the two lower classes were tried for offences by the superior thanes, who were answerable only to the king. Harts, bisons, hares, and rabbits were enclosed, and the service of enclosing and stalling was imposed on the villeins and burghers. All men were allowed to shoot wolves and foxes outside the enclosure, and every two villeins had to keep a dog. Domesday mentions a class of royal huntsmen who seem to have all been English, and to have passed into

the service of William, and an elaborate establishment of the Royal Hunt is given in the *Constitutio Domus Regis* in the red book of the exchequer, which is now known to be as old as Henry I.'s time. After the Conquest all the remaining unenclosed folc-land was reserved to the crown, and the crown-land was further increased by the property of those who had fought in defence of England at Hastings.

William I. introduced the idea that hunting was the pastime of kings, to be followed simply for their pleasure and rigorously kept from their subjects.

In making the New Forest, villages and churches were destroyed with the one purpose of promoting the king's pleasure. Entries in Domesday show how the properties of individuals dwindled under the king whose fatherly affection was greater for the "tall deer" than for his people. The nature of the Conqueror's forest laws is known from later notices and from the complaints of chroniclers. "His great men bewailed it, and the poor men murmured thereat; but he was so obdurate that he recked not of the hatred of them all; but they must wholly follow the king's will, if they would live or have property, land, or even his peace." (*A. S. Chron.*, Rolls Series, p. 190). Under William II. these laws were probably enforced with increased severity, the greatest sufferers naturally being Englishmen who still kept some of their old property. Fifty such men were charged with breaking the Conqueror's forest laws, and proved their innocence by ordeal. William I. first attached the punishment of mutilation to offences against the forest laws: William II. punished such offences with death, even when the offenders were Normans of high rank and his own relations. But it must be remembered that William I. substituted mutilation for capital punishment in every case; in the forest laws it took the place of the fine imposed by Cnut and led the way to the still heavier penalty.

In the charter granted by Henry I. early in his reign, he says that by common consent of his barons he has kept the forests in his own hand as his father had them. He probably issued forest laws of great severity and extended their jurisdiction within all franchises, so keeping to himself the right of hunting throughout the kingdom. So greatly did he care for the deer for the sake of the delights of hunting, that he scarcely made a distinction between the slaying of deer and the slaying of men (William of Newburgh, i. 3.).

Stephen came to the throne anxious to conciliate the barons and full of concessions. He promised that he would not keep other men's woods in his hands "as King Henry had done, who every year impaled them if they took venison in their own woods, or if they destroyed or lessened them for their own needs." In the charter granted at his first great council he promised to restore to the churches and the nation the forests added by Henry I., retaining those held by William I. and William II. He did not keep his promise (Stubbs, i. 403). But that it should have been made at such a time, and accepted by the barons, shows that in this direction the crown was becoming stronger; for the forests made by William II. which Henry

I. had given up are now added to those of William I. In the unsettled times of Henry I. and Stephen encroachments and trespasses were made in the king's forests.

From the accession of Henry II. the administration of the forests occupies a very important and clearly-defined position, side by side with the common law. Early in his reign he appointed justices who visited the forests when the justices itinerant were on circuit. The general visitation of 1166, after the council of Clarendon, when two justices visited the whole country, was followed the next year by a survey of the forests, and this again by a circuit of the shires. Again in 1175 Henry himself held a great visitation of the forests at Nottingham, and in spite of the expostulations of the judiciary, he exacted large fines for the destruction of vert and venison which he had himself authorised in the war. Just before this, he had hanged four knights at Lichfield for the murder of a forester. The assize of Woodstock (A.D. 1184) is the first forest code now extant. The punishments were probably not quite so severe as those enforced by Henry I. The archbishops, bishops, earls, barons, knights, free tenants, and all other men were to attend the court of the forest justice at the summons of the chief forester (art. 11). This was enforced by Richard I., and repealed by the great charter (art. 44), and the charter of the forest (art. 2). By the connivance of the legate, Hugo Pierleoni, even the clergy, whom the common law could not touch, were to be subject to the law of the forests; the foresters were strictly enjoined not to hesitate to lay hands on them if they found them trespassing (art. 9). No one was to cut his own wood in the king's forest except for fuel, and even this, subject to the view of the forester (art. 3). Every one twelve years of age living within the forest bounds was to swear to the king's peace (art. 13).

In 1198, when Geoffrey Fitz-Peter succeeded Hubert Walter as justiciar, one of his first measures was to hold a visitation of the forests. He enlarged the assize of Woodstock, and attendance at the session of the forest justice, required by article 11, was enforced as rigorously as attendance at the shire and hundred courts. Fitz-Peter, however, was equally severe in other branches of the administration.

Forest Charter. The first forest charter is that of Henry III., issued by the earl marshal on 6th November 1217. Formerly a charter of John dated 1216 was cited on the authority of Matthew Paris, but this is really the charter of 1217 (Stubbs, i. 403). In a recently discovered charter of liberties, supposed to be a French forgery of 1216, references to the forests occur which seem to anticipate the charter of 1217 (*Eng. Hist. Rev.*, April 1894). All the forests made by Richard I. and John were to be at once disafforested (c. 3), but those of Henry II. only if they were to the damage of the owners of the woods afforested (c. 1). No one was to lose life or limb for offences in venison, but to be heavily fined. If he could not pay this fine he was to be imprisoned for a year and a day, and then in default of sureties was to be banished (art. 10). An archbishop, bishop, earl, or baron, going through

the forest, was to be free to take two beasts by view of the forester. If he was not present they were to cause a horn to be blown that they might not seem to be stealing the king's deer (c. 11). Only foresters in fee were to take tolls. Thus some of the abuses pressing most heavily on the people were removed, and this charter was to the forest administration very much what the great charter was to the constitution at large. In both cases tyranny led to a definition and assurance of liberties, thus making them more secure for the future than they would otherwise have been. In 1218, the year following the issue of the charter, a perambulation of the forests was held to determine their extent for all time. By an ordinance of the same year, Henry III. was restricted from making grants in perpetuity until he should be of age, and in 1227, when he attained his majority, this ordinance was said to invalidate all former grants unless they were now renewed on payment. At the parliament of Oxford the barons had again to seek redress against the encroachments of the king, who had re-afforested woods and lands disafforested by perambulation (art. 7), and had given warrens in forests disafforested by charter (c. 9).

In 1299, when Edward I. was in urgent need of money for the French war, he confirmed the great charter and the charter of the forest in return for a grant of one-eighth from the barons and knights. In the case of the forests, the phrase "salvo jure coronæ nostræ" was inserted, but a second confirmation was demanded and granted two months later, without this clause. In consequence of delay in carrying out disafforestations under the charter of the forest, twenty articles called "Articuli super Cartas" were passed the next year by the first complete parliament since 1296. Infringements of the charters were to be inquired into, and severe measures taken with regard to forest administration. A perambulation was held in 1301, and Edward confirmed the charters again at the parliament of Lincoln. In 1305, Clement V. granted him absolution from his oath, and this he only used to evade the forest articles which he had been compelled to grant in 1299 and 1301. The people still complained of the oppressions of forest officers. Their grievances were (1) Accusations and indictments were not made by lawful inquests, but by command of one or two foresters or verderers in order to extort money. (2) The great number of forest officers who were obliged to live near the forest, and to sell the wood and deer for their means of livelihood. These complaints were met in 1306 by the ordinance of the forest. One of its six articles provided that no forest officer was to take part in any assize, jury, or inquest without the forest (c. 3).

From the reign of Edward III. the hold of the crown on the forests became gradually weaker. Elizabeth and James I. alienated much of the forest territory, letting it on lease or in fee-farm, and great dissatisfaction was caused in 1641 by the attempts of Charles I. to reclaim this land. The king's title was found by inquisition, but by a jury acting under prejudiced direction. The Earl of Holland held a court as chief justice in eyre of the forests almost every year, though the

old custom had been once in three years. The royal forests in Essex were so enlarged that they were said to include the whole county as in John's time. The Earl of Salisbury was nearly ruined by the loss of his estate near the New Forest. The boundaries of Rockingham Forest were extended from six to sixty miles, and enormous fines imposed on the trespassers. Thus the Earl of Salisbury was fined £2000, the Earl of Westmoreland, £19,000, and Sir Charles Hattton, £12,000. It is probable, however, that these fines were not exacted in full. The king obtained Richmond Park by depriving many of his subjects both of their freehold lands and their rights of common, but they probably received compensation. In 1641 the Act for the Limitation of the Forests determined for ever the extent of the royal forests according to their boundaries in 20 James I.

[*Dialogus de Scaccario*, ed. Madox, 1768.—*Manwood's Forest Laws*, ed. Nelson, 1717.—Stubbs, *Const. Hist.* i., *Select Charters*.—Ellis, *Int. to Domestday*, i.—Freeman, *Norman Conquest*.—Hall, *Court Life under the Plantagenets*.—Pearson, *Hist. Maps of England*.—Lappenberg (trans. Thorpe), *Hist. of England under the A. S. Kings*.—Cowell, *Interpreter*.—*Statutes of the Realm* (2nd edition) for Charters and Statutes of the Forest after 1215.—Gardiner, *Select Documents of the Puritan Revolution*.] M. T. M.

FOREST, BEASTS OF. See FOREST, MEDIEVAL, p. 110.

FOREST CHARTER. See FOREST, MEDIEVAL, p. 112.

FOREST, COURTS OF. See FOREST, MEDIEVAL, p. 108.

FOREST, NAMES AND EXTENT OF. See FOREST, MEDIEVAL, p. 111.

FOREST, OFFICERS OF. See FOREST, MEDIEVAL, p. 108.

FORESTERS. See FOREST, MEDIEVAL, p. 108.

FORESTS, ECONOMIC ASPECTS OF. History shows that, except in arctic regions, there was once a natural covering of woodlands over the greater part of the globe. In the writings of Tacitus and Cæsar distinct evidence is given of the general distribution and character of these woodlands throughout France, Germany, and Britain; and in those parts of the world, such as the backwoods of America and the jungles of Burma, where increase in the population is only now gradually necessitating the clearance of the primeval forests in order to permit of the extension of arable and pasture land, the same processes may at the present day be seen as took place centuries ago in the more civilised and settled portions of the globe.

In many of the countries of Europe the processes by which the present ratio of woodland to total area has been attained are clearly traceable. To detail them or to examine into their causes is beyond the scope of this article. According to the Government Statistical Returns for 1905, the utilisation of the soil is as follows throughout most of the European countries:—

Country.	Latest data available for.	Total Area (acres), Lakes, Rivers, etc.	Total Acreage (approximate) under			
			Corn Crops.	Grass and Clover.	All other Crops.	Woodlands.
United Kingdom	1903	77,642,099	8,393,000	34,636,665	4,688,388	8,029,360
Germany	1900	133,585,000	38,177,739	27,769,244	14,741,698	34,569,794
France	1903	130,374,482	33,496,808	31,371,872	10,293,049	22,224,184
Russia in Europe (excl. Poland)	1902	1,244,367,351	174,592,143	72,646,845	21,379,220	425,664,842
Austria	1903	74,102,001	16,651,757	16,949,479	4,904,884	24,157,072
Hungary	1903	80,979,000	24,721,609	9,731,455	7,722,527	22,274,033
Sweden	1900	101,565,000	4,218,217	6,547,303	1,629,074	51,146,579
Italy	1895	70,787,236	20,518,000	17,922,000	18,442,000	10,266,810
Denmark	1901	9,500,000	2,866,899	2,827,284	1,045,767	682,828
Holland	1902	8,038,000	1,337,589	3,091,679	1,059,756	625,852
Belgium	1903	7,277,000	1,899,516	990,275	1,776,209	1,250,600

If we compare the most civilised countries of Europe, the following ratios will exhibit themselves :—

Country.	Percentage of Total Area under		
	Forest.	Tillage.	Pasturage.
United Kingdom	3½	24½	36½
France	17	48	17
Germany	25½	48½	16
Austria and Hungary	30	42	17

The proportion in which woodlands should be retained for climatic, national-economic considerations can never be stated in anything like an authoritative manner. Thanks to our insular position, and more particularly to the beneficial influence exerted on the climate of Britain by the Gulf Stream, the woodland area has with impunity been restricted to so low a ratio as would undoubtedly have entailed agricultural disaster in the interior of the continent of Europe. It is not merely the proportion of woodland to the total area that must be taken into account, but also the manner in which it is distributed over the surface of the country. Thus India, with a total area of 737,703,322 acres, has, according to the *Statistical Abstract for British India* for 1905, state forests aggregating 67,136,162 acres, or 9·5 per cent of the whole, without reckoning the unclassified jungles covering many thousands of square miles throughout the thinly-populated provinces of Burma and Assam; but as these are not equally distributed over the length and breadth of the land, certain portions of Bengal, Madras, and Upper Burma are in particular now and again liable to famine when the south-west monsoon fails to deposit the normal quantities of moisture in any year.

In Britain the clearance of the forests was throughout the middle ages not only unchecked but directly encouraged, so that as early as the reign of Henry VII. the woodlands covered only about one-third of the total area; in Ireland, too, so late as the 17th century the policy of clearance of forests was urged on by James I., Charles I., and Cromwell. On the continent, on the other hand, legal action was taken as early as the beginning of the 14th century to restrict clearance of woodlands. Thus in Ger-

many in 1304 the first edict was issued forbidding fresh clearances in a part of Alsace, and ordering land to be replanted which had been cleared without permission. Similar edicts were issued in France by Charles IX. and Henry IV. in the 16th century, and a more stringent law on the subject was the celebrated *ordonnance des forêts* of 1669. At the time of the revolution this was practically set aside by a decree of 1790, but the impetus thus given to excessive clearance was so soon productive of evil results that a prohibition had to be issued from the consulate prohibiting further clearances. At the present day all circumstances relative to the clearance of woodland are provided for in the *code forestier*, framed for the better administration of the national, communal, and private forests.

The Climatic Influence of Forests is discussed by Humboldt, who in the *Aspects of Nature* laments that the wants and restless activity of man "gradually despoil the face of the earth of the refreshing shades which still rejoice the eye in Northern and Middle Europe, and which, even more than any historic documents, prove the recent date and youth of our civilisation." The subject was never studied seriously until 1867, when observations were begun by Prof. E. Ebermayer of Munich, of which the first results were published in 1873 in his celebrated work *Die physikalischen Einwirkungen des Waldes auf Luft und Boden*. Since then, however, more extended observations conducted throughout Germany, France, and Switzerland have in many ways caused his deductions to be modified. The best *résumé* of the work accomplished in this direction is to be found in Prof. R. Weber's *Die Aufgaben der Forstwirtschaft*, forming the opening portion of Prof. J. Lorey's *Handbuch der Forstwissenschaft*, 1886, from which the following results are taken.

1. *As regards Atmospheric Temperature.* The average results of observations made during ten years (1875-85) in different kinds of forest at heights varying from 10 to 3000 feet above the sea-level, and at latitudes between 47½° to 55½° N., showed that in general the mean atmospheric temperature in woodlands is cooler than in the open, as shown in the following table :—

Temperature of Woodland Air, compared with that of Air in the Open.		
In ° Fahr.	At 5 feet above the ground.	In the Tree-crown.
Spring	1.24° cooler	0.57° cooler
Summer	2.55° "	1.47° "
Autumn	1.13° "	0.41° "
Winter	0.61° "	0.03° warmer
Annual Average of all recorded Observations.	1.044° cooler	0.414° cooler

The annual average temperature in woods growing in closed canopy is found to be lower than in the open, although the crowns of the trees are on the whole a little warmer in winter. The difference is greatest in summer, least in winter, and about midway between these extremes in spring and autumn; but the mean annual difference seldom amounts to over 1° Fahr. near the ground, and to scarcely $\frac{1}{2}$ ° in the crown. The prevention of insolation of the soil during the long hot days of summer, and the rapid transpiration of the foliage, exert greater influence on the atmospheric temperature than can be ascribed to shelter from wind and decrease of nocturnal radiation.

Observations made in southern Germany established the fact that in the forests it is cooler during the day, and warmer during the night than in the open. During the day the shade afforded by the crowns of the trees keeps the air cool, whilst the leafy canopy interferes with the radiation of warmth during the night. These equalising influences are naturally strongest during spring, summer, and autumn, when foliage is most abundant, whilst in winter the coniferous woods with evergreen canopy are milder than deciduous forests. Owing to these differences in temperature, beneficial currents of air set in between the woodlands and the open country, in the same manner as land and sea breezes are formed. During the day the cooler and moister air of the forest flows out to the open, to take the place of the heated air ascending; at night a current sets in from the open, cooled by radiation, towards the forest. The immediate action of forests is, therefore, to modify the daily maxima and minima of atmospheric temperature, hence it may be deduced that a comparison of the absolute extremes of temperature during the year must exhibit the sum total of the influence exerted by woodlands on atmospheric temperature. As extremes of temperature are bad alike for man and beast, and for agricultural operations, this modifying effect can sometimes be of immense importance from a national-economic point of view, for many places that were once fertile are now little better than barren wastes in consequence of the reckless denudation of forest. The German observations yielded the following results on this point:—

Average difference of temperature in the forest and in the open at 5 feet above the ground.	
Exhibited by maxima of July	Exhibited by minima of January
6.82° Fahr. cooler in forest	2.05° Fahr. warmer in forest

In making these observations it was found that geographical position, exposure to winds, and the nature of the forest exerted modifying influences to a certain, and often not inconsiderable extent.

2. *As regards soil temperature*, observations in southern Germany gave the following results:—

Average soil temperature in the forest compared with that in the open.

— = cooler by. + = warmer by.

In ° Fahr.	At surface	At 1 ft. depth	At 2 ft. depth	At 3 ft. depth	At 4 ft. depth
Spring	-4.08°	-3.08°	-3.24°	-2.79°	-2.32°
Summer	-6.10°	-6.71°	-7.07°	-6.86°	-6.53°
Autumn	-1.85°	-2.16°	-3.04°	-3.26°	-3.58°
Winter	-0.23°	+0.43°	-0.45°	-0.22°	-0.34°
Annual average	-3.15°	-2.88°	-3.45°	-3.28°	-3.19°

Thus the mean annual temperature of the soil in woods is at all these depths of observation cooler than in the open. The differences are greatest in summer, least in winter, and about the mean in spring and autumn. In countries with warm summers this reduction of soil temperature over large areas by means of woods has a decidedly beneficial tendency.

3. *As regards the Degree of Atmospheric Humidity*.—Observations throughout Germany and Switzerland have shown that as regards the *absolute humidity of the air*, forests have no appreciable climatic effect, although they of course exert very great influence on its *relative humidity*. Taking all the observations together, the results arrived at show that the mean annual relative humidity of woodland air is from $3\frac{1}{2}$ to 10 per cent greater than that of air in the open, but that the difference varies greatly according to the season of the year, being greatest in summer and autumn and least in winter and spring.

4. *As regards the Precipitation of Aqueous Vapour*.—As has above been stated, woodland air is cooler than that in the open, whilst the trees themselves are also cooler, especially in summer, hence when a current of air is wafted from the open into the forest its temperature falls and it approaches nearer to the point of saturation, i.e. its relative humidity increases. If it were already near the point of saturation, the formation of dew must take place. Woodlands, therefore, act as condensers of atmospheric moisture, and decrease the absolute humidity of the air whilst increasing its relative humidity; at the same time they also add to the humidity of the air by transpiration. Very

careful observations made for the purpose have as yet failed to establish the actual effect of forests in the precipitation of dew and rainfall. Corrections of such various sorts have to be made for the correlation of readings at different points in the forest and in the open, as to make the deductions open to serious objections. Thus readings at 192 points of observation in Germany, corrected as carefully as possible with reference to causes of difference, lead to no other trustworthy inference than that at high altitudes large extents of woodland must considerably increase the local rainfall. But as nearly one-fourth of the rainfall is actually intercepted by the crowns and stems of the trees, forest growth offers great mechanical advantages in preventing the scouring and washing away of soil in mountainous tracts. Although it is a generally accepted dictum that rainfall is greater near large forests than in the open under similar physical conditions, this has not yet been proved by scientific observers. But owing to their lower temperature, their greater relative humidity, and the mechanical obstruction they offer to currents of air, forests certainly act as condensers of aqueous vapour, though their influence in this respect is much greater in mountainous tracts than on plains.

5. *As regards Evaporation of Soil-moisture.*—Observations made in Germany and Austria during ten years (1875-85) proved that, even in the vicinity of the forest, evaporation in the open was considerably greater than within the woods. The results are as follows:—

	Water evaporated.
In the Open	20.9 inches
In the Forest	9.5 „
Lower in forest than the open by	11.4 inches
Evaporation in forest expressed in the percentage of that in the open	46%.

The practical importance of this will be at once seen when it is recollected that the mineral food-supplies can only be taken up from the soil by the rootlets of plants when presented in the form of soluble salts.

6. *As regards the Feeding of Streams and the Protection of the Soil.* The action of forests is to retain in the soil a large proportion of the rainfall, which, by percolation to the lower layers and the subsoil, tends to feed the streams perennially, and to maintain a constant supply of moisture. That the mechanical action of rain in regard to washing away soil on steep slopes is interfered with by the crowns and stems of trees, has already been noted. But by the decomposition of dead foliage, etc., to form *humus* or mould, a strongly hygroscopic admixture is conveyed to the upper layer of the soil, thereby enabling it to imbibe and retain moisture with sponge-like capacity, and

giving the latter time to percolate instead of running off rapidly on sloping ground. The evaporating action of sun and wind is counteracted by the leaf-canopy, which also prevents radiation of warmth at night. When large tracts of country are denuded of forest, increase of temperature during the days of summer, rapid radiation of warmth by night, diminished dew-formation in spring and summer, and unchecked evaporation of moisture (through insolation and the free play of winds), must be the inevitable results. Such consequences, involving serious agricultural disasters, might easily be pointed out in many parts of continental Europe, Western Asia, and India; references may, however, be made on these matters to the articles in the *National Review*, "Forest Science," July 1889, p. 691, and the *Edinburgh Review*, "The Penury of Russia," January 1893. The latter instance is a terrible object-lesson regarding the indiscriminate clearing of woodlands; in the nine years ending in 1887 a decrease of no less than 101,861,668 acres took place in the area returned as woodlands, a great deal of which has simply become waste land. Forests tend to break the violence of the rainfall, retain temporarily a large proportion on the stem and branches, from which it trickles to the ground, bind the soil by means of their roots and the humus layer formed by the dead foliage, and imbibe and retain the moisture till it can gradually percolate to the lower strata for the maintenance of the beneficial perennial streams. In the alpine districts of southern Europe "ban-forests" are subject to special laws, being retained as protection against landslips, avalanches, etc.

7. *As regards General Hygienic Effect on the Atmosphere.*—Whilst fresh clearance of forest tracts, especially in tropical and sub-tropical countries, induces fever and ague, the re-planting of feverish localities, like the Campagna di Roma and the Tuscan marshes, has improved their climate. But these effects are more likely due to the degree of direct insolation, freely accorded in the one case, and counteracted in the other, than to any hygienic property inherent in tree-growth. In the latter case the evaporation of stagnating soil-moisture owing to the transpiration through the foliage would of itself go far to remove causes of insalubrity.

Ebermayer's experiments showed that woodland air had most ozone in winter, which proves that the amount of ozone it retains can not be due to any chemical action of the foliage, for even the evergreen conifers only transpire during the winter period of rest. But as in the decomposition of the carbonic acid of the air by tree-foliage from spring to autumn, the carbon is absorbed and oxygen set free, and as during the period of active vegetation the hours of sunlight far outnumber those of

darkness—when oxygen is imbibed by the foliage, and carbon set free—it follows that, apart from their invaluable æsthetic influence, the planting of trees in towns and cities decidedly tends towards the purification of the air from its excess of carbonic acid; trees and forests act like filters in fact.

The Monetary Value of Forests and of Forest Produce.—In actuarial calculations affecting woodlands a somewhat lower rate of interest must be adopted than is obtainable on ordinary investments, owing mainly to the social prestige which usually accompanies large wooded estates with good shooting, and also to the fact that timber and forest produce have hitherto steadily appreciated in value whilst other commodities have relatively depreciated; this matter is well stated in Prof. G. Heyer's *Einleitung zur Waldwerthrechnung*, 1883, pp. 3-16. What rates of interest should be fixed on for a comparison of the *rentability* of the agricultural or the sylvicultural utilisation of any soil depends on varying local conditions. Considering the much longer period elapsing between the formation and the realisation of timber crops, and the greater dangers to which they are meanwhile exposed from wind, fire, insects, etc., a higher rate of interest might naturally be looked for; but in most civilised countries, as a matter of fact, woodlands are practically confined to tracts which, either from poverty of soil or other physical causes, are unsuited for agricultural occupation, or pay better under timber. According to Heyer, whilst the ordinary rate of interest was from 4 to 4½ per cent throughout Germany, the rate of interest for calculations relating to agricultural soils was 2 to 3 per cent, and that prescribed for sylvicultural calculations in the state forests was from 2½ to 3 per cent. The economic importance of the *steady appreciation in the market value of forest produce* is a feature that deserves attention, for this is bound to be accentuated in the future, seeing that whilst population and demands for timber, etc., are constantly increasing, the woodland area, and therefore the possibility of satisfying these demands easily, are constantly decreasing throughout the whole world.

Prof. K. Gayer, in his rectorial address before the university of Munich in 1889, *Der Wald im Wechsel der Zeiten*, page 15, states that the 34½ millions of acres of woodland in Germany annually produce about 60,000,000 cubic méters of timber and fuel, and yield annually about £20,000,000 to £22,500,000, which at 2 per cent would make their capital value about £1,000,000,000. And, according to Weber, *op. cit.* page 85, it was found in 1875 that no less than 583,000 persons were engaged in industries directly dependent on the timber trade, in addition to £4,150,000 being annually disbursed for various manipulations before the

produce reached the buyer, and without reckoning costs of transport thereafter.

The most valuable forests in the British empire are undoubtedly those of India, which yielded a revenue of £1,481,116 during the year 1903-1904. Even accepting 2 per cent as the rate of interest obtained, this would make their capital value about £74,000,000; but it is probably more.

Even the 3,029,360 acres of woodland in the United Kingdom represent a very considerable capital. Taking the average period of rotation of the timber crops at 90 years, the rental of the land at 5s. per acre per annum, the cost of planting, etc., at £2 an acre, and the rate of interest at which the landowner is content to work as 2½ per cent, their actual cost at the present moment (treating them as ranging normally up to 90 years) would amount to $(3,029,360 \times £2 : 5s.) 1 \cdot 025^{40} = £20,652,661$. But the timber and minor forest produce of home growth is entirely inadequate to supply the demands existing in Britain, as may be seen from the following statement showing the quantities of the chief imports during 1903, and the countries whence they were obtained:—

IMPORTS.	VALUE.
All kinds of Wood, Timber.	1903.
From Russia . . .	£6,639,469
„ Sweden . . .	5,053,309
„ Norway . . .	3,224,344
„ Germany . . .	1,365,233
„ United States . .	5,214,730
„ British East India .	687,430
„ „ North America .	4,888,000
„ other countries . .	2,395,699
Total value of Imports	£29,468,218
Deduct value of Exports .	569,477
Excess value of Imports over Exports . . .	£28,898,741

Value of the different kinds of Forest produce imported into the United Kingdom, 1903:—

Wood and Timber—

Hewn—

Pit wood or Pit props .	£2,535,365
Fir, other than Pit wood or Pit props . . .	1,542,163
Oak . . .	1,184,442
Teak . . .	887,431
Unenumerated . . .	230,548

Sawn or Split—

Fir . . .	17,414,734
Unenumerated . . .	777,785
Staves . . .	570,859

Furniture Woods and Hardwoods—

Mahogany . . .	797,125
Unenumerated . . .	1,182,499
Cabinet and Joiners' work .	1,176,641
Woodware and Turnery . .	1,168,621

Total . . . £29,468,218

These do not include the imports of cutch, gambier, caoutchouc, gutta-percha, etc., amounting to nearly £8,000,000 more.

It would of course be a physical impossibility to produce the greater part of these imports in Britain, but there is no climatic reason why, at any rate, a considerable portion of the following timber should not be home grown :—

Imported from Russia . . .	£6,639,469
„ „ Sweden and Norway . . .	8,277,653
„ „ Germany . . .	1,365,233
Total . . .	£16,282,355

Before enumerating the more important literature touching on the economic aspects of forests, special and prominent mention must be given to the very masterly and complete short treatise on the history of forestry, and the national-economic importance of forests and of forest-produce, which is comprised in the three articles on *Forsten*, contributed by Prof. M. Endres of Tübingen to the *Handwörterbuch der Staatswissenschaften*, edited by Conrad, Elster, Lexis and Löning, 1898-1901.

[Rau, *Lehrbuch der Polit. Oekonomie*, article "Forstwirtschaft," by Wagner-Nasse.—Schönberg, *Handbuch der Polit. Oekonomie*, art. "Forstwirtschaft," by J. v. Hefnerich.—Lorey, *Handbuch der Forstwissenschaft*, 1886, art. "Forstpolitik," by J. Lehr.—*Encyclopædia Britannica*, art. "Forests."—W. Schlich, *Manual of Forestry*, 1887, vol. i. pp. 12-96.—*Nineteenth Century*, art. "Woodlands," July 1891.—*Edinburgh Review*, art. "The Penury of Russia," January 1893.—J. Nisbet, *British Forest Trees*, 1893, Preface and Introduction.—Roscher, *Nationalökonomie des Ackerbaues*, etc., bk. iii. ch. iii.—*Ein nationalökonomisches Hauptprinzip der Forstwirtschaft*, 9th ed., 1878.—B. E. Fernon, *Forest Influences*, U.S.A., 1893.—Professor Isaac Bayley Balfour, *Address on Forestry at the British Association*, § D. (Biology), Oxford, 9th August 1894.] J. N.

FORETHOUGHT. Forethought may be defined as that species of imagination which enables a man to realise at any given time his probable wants in the future. What is not immediately present to the senses cannot excite intense fear or desire unless it be vividly realised by the imagination. Without forethought, therefore, it would be impossible for a man to deny himself now in order that he might enjoy hereafter. He might desire riches as the means of instant enjoyment; but he would not accumulate riches as the means either of enjoyment or of production in the future. Thus forethought is the necessary condition of all saving, and therefore of the formation of capital.

The degree of forethought possessed by any race or individual is determined by causes too numerous and too obscure for complete enumeration. Among the more obvious of these causes is climate. In some countries the climate is so benign as to provide the means of life and of pleasure almost without any assistance from

man, in others the climate is so rigorous that, with the most pinching parsimony, only a bare existence can be gained. In neither case can we expect much forethought from the inhabitants. In the one case they are comfortable without forethought, in the other case no forethought could make them comfortable. Moreover a luxurious climate relaxes, and a frozen climate benumbs the intellectual powers. It is in the intermediate climates that man can do most to better his condition and has most mental energy to conceive and to desire improvement.

Another influence which affects forethought is religion. Some religions have stimulated, others have repressed the natural instinct to enjoy the present which so often operates against forethought. It is true that the ascetic temper which condemns pleasure condemns also the pursuit of riches. Yet no communities have developed a higher degree of forethought than Scotland and New England, where an austere religion has been all but universally accepted. In such communities the enjoyment of the passing hour is doubly difficult, and the mind even of the ordinary man is forced to direct itself upon the future. A third influence is government. Men will not deny themselves in order to attain a remote object unless they have fair grounds for hoping that their self-denial will bear fruit. Such grounds they can have only under a tolerably good government. A government which takes an undue proportion of the national means to fill its treasury, or which permits its servants to practise extortion, or which fails to defend public order against foreign assailants or domestic criminals, or which maintains the thoughtless in comfort at the charge of the provident—still more a government which commits many of these faults—will effectually weaken forethought, and may in time reduce the richest country to penury. On the other hand a good and orderly government will stimulate forethought to such an extent as to cause a steady accumulation of capital. Another influence is education. In so far as education weakens the force of momentary appetite, and strengthens the reflective and imaginative powers, it tends to increase forethought.

Yet another influence affecting forethought is the opportunity for safe and profitable investment of savings. The motives to save are stronger where savings can be not merely hoarded but so employed as to produce an immediate return. In this way the modern development of joint-stock companies has done much to diffuse forethought. But where forethought is general the accumulation of capital will gradually lower the rate of interest and profit obtainable. Whether this process will ultimately weaken forethought by lessening its returns is a question which we are hardly in a

position to solve. We have not sufficient materials for judging the effect of a very low rate of interest continued for a very long time. As yet the rate even in the richest countries appears sufficient to stimulate forethought. A certain amount of saving has always been prompted by the need of a reserve fund against old age, sickness, or other calamity, and has therefore been independent of the attraction of interest, indeed where the rate of interest is low more must be saved for these purposes and for the benefit of children, to produce the same income. But such saving as is prompted by the desire to better one's condition, to increase one's income, must be discouraged as the future return to a given exertion of immediate self-denial becomes less and less. Saving of this kind was narrowly restricted in those states of society in which there were few modes of safe and lucrative investment. Much that would now be saved was then spent upon stately houses, large retinues, massive plate, and gay clothing. It is at all events possible that, as investments become less profitable, the taste for unproductive expenditure may become stronger. Taking mankind as a whole, it may safely be said that they are deficient in forethought. Yet there are many individuals whose forethought is excessive. Forethought is not, like truth or justice, a virtue of which one cannot have too much. It is a faculty which needs to be balanced by other faculties. Men defective in a healthy power of enjoyment or constitutionally timid or stunted in feeling by early privation do frequently over-estimate the future in comparison with the present, and persevere in this error until they are ready to descend into the grave. In such men the habit of looking to the future has become a disease fatal to happiness and pernicious to their higher nature. Nay, it sometimes goes so far as to defeat its own object, the accumulation of riches. For the miser will deny himself the recreation and even the food needful to his full efficiency as a producer. The firm and tranquil temper which can duly balance the future with the present may not always tend to the greatest individual accumulation, but it is most conducive to the general well-being.

[Adam Smith, *Wealth of Nations*, bk. ii. ch. iii., Of the Accumulation of Capital.—Mill, *Principles of Political Economy*, bk. i. ch. xi.; On the Law of the Increase of Capital.—Marshall, *Principles of Economics*, bk. iv. ch. vii., On the Growth of Wealth.—Bagehot, *Economic Studies*.]

F. C. M.

FORFEITURE is the loss of property or of rights in consequence of some act or omission on the part of the owner of the property or of the person in whom the right was vested. Forfeiture of leasehold property in consequence of a breach of covenant on the part of the lessor is now comparatively rare, as recent legislation

enables the lessee in most cases to remedy the breach before the lessor can enforce his right (see ENTRY, RIGHT OF). Forfeiture may occur through the non-observance of a condition imposed by the will or settlement under which property is held (e.g. when property is given over to a third person in the event of the tenant for life, remarrying, or changing his religion or his name, or becoming a bankrupt, etc.). E. S.

Formerly, when a man was convicted of treason or felony, he forfeited all his property both real and personal. By a barbarous legal fiction his blood was said to be corrupted so that descent could not be traced through him, and upon his execution his children had no claim to his land. It therefore escheated to the lord in cases of felony and to the crown in cases of treason. It was thus that the demesne of the crown was so often enlarged when great landowners suffered for treason. The personal property, whether of the traitor or of the felon, passed to the crown immediately upon his conviction. This aggravation of punishment was objectionable on many grounds. If the felon or traitor actually suffered death, any further punishment was unnecessary. Forfeiture of property in such a case bore most hardly on the innocent widow and children. If the punishment of death were remitted there was the further inconvenience of taking away a man's livelihood and adding to his temptations as soon as he was set at large. Lastly the penalty of forfeiture acted as a temptation to rulers to seek the conviction of a wealthy accused person. For these reasons it had often been condemned by theoretical writers before it was abolished by the act 33 & 34 Vict. c. 23. Under this act, however, a person convicted of felony and sentenced to twelve months' imprisonment or upwards is still liable to forfeit any office under the crown, any ecclesiastical benefice, any place in a corporation, or any pension which he may hold.

Another case of forfeiture occurs when the lessee of land breaks a covenant in his lease to which a proviso for re-entry is attached. In such a case the lessor could formerly sue on the covenant without more ado. But by the Conveyancing and Law of Property Act of 1881 (44 & 45 Vict. c. 41) he must now serve on the lessee a notice specifying the particular breach complained of, and require him to remedy the breach or make compensation. Only if the lessee fails to comply within a reasonable time can he enforce his right of re-entry, and even then the court has full discretion to grant the lessee relief on reasonable terms. These provisions do not apply to the breach of a covenant against underletting, or to the case of non-payment of rent. Indeed they are only intended to protect the lessee against forfeiture in cases where it is an excessive penalty, and thus to increase his reasonable security.

Under the feudal land law a freehold tenant might forfeit his land by certain breaches of the conditions on which he held it.

Smugglers are still liable to forfeiture of the goods smuggled, in addition to other penalties.

The Post Office Savings Bank regulations decree the forfeiture of deposits in other savings banks which are concealed at the time the Post Office account is opened, in spite of the depositor's declaration to the contrary. Partial forfeiture to the National Debt Commissioners under this rule are of constant occurrence.

[Sir James Stephen's *History of the Criminal Law of England*, vol. i. pp. 487-489.—Goodeve, *Modern Law of Real Property*.—Williams, *Law of Real Property*.—Woodfall, *Law of Landlord and Tenant*.—*The Conveyancing and Law of Property Act*, 1881, ed. Clark and Brett or ed. Wolstenholme.] F. C. M.

FORGED TRANSFER. The risk to which buyers of shares, stock, or debentures transferable by deed of transfer were formerly exposed, owing to the possibility of the vendor's signature on the transfer being forged, has been considerably reduced by the Forged Transfer Acts of 1891 and 1892. These acts enable companies and local authorities to make compensation to persons to whom certificates have been issued in pursuance of such forged transfers, and have already been very widely adopted. It must, however, be borne in mind that the adoption of the acts is purely voluntary, and that in the case of companies who refuse to recognise the rights of defrauded purchasers, the old state of things continues. E. S.

FORGERY. "There is," says Mr. Justice Stephen (*History of the Criminal Law*, vol. iii. p. 186), "no statutory definition of forgery. The common law definition is making a false document with intent to defraud." Making includes, not merely the composition of an entire document, but also altering a document or signing it in the name of another person. Intent to defraud is presumed to exist if at the time of making there was in existence a specific person capable of being defrauded thereby. There are as many kinds of forgery as there are instruments which can be forged. Forgery was a misdemeanour at common law.

The first severe statute directed against forgery is the 5 Eliz. c. 14. In the 18th century the use of paper money and the increase of trade gave an impetus to forgery which it was sought to counteract by statutes making many forms of forgery capital. The law was mitigated by the Act 11 Geo. IV. and 1 Will. IV. c. 66, and again by the Act 7 Will. IV. and 1 Vict. c. 84, but forgery of the great seal remained treason and capital until 1861, in which year the statute law relating to forgery was consolidated by the Forgery Act 1861 (24 & 25 Vict. c. 98). Forgery of the great seal, of

securities in the public funds, of bank-notes, bills of exchange, wills, and certain other documents, is punishable by penal servitude for life. Other kinds of forgery are punishable with maximum terms of fourteen and seventeen years' penal servitude respectively. Forgery of a trade mark makes the offender liable to two years' imprisonment with hard labour. The making or possessing of instruments or paper for forging bank-notes is also severely punished. In general the uttering of a forged document, i.e. the offering or disposing of a forged document knowing it to be forged, is punishable as severely as the act of forging. The scope of forgery increases with the multiplication of documents consequent on the advance of civilisation, and the progress of science perhaps affords as many new expedients to the forger as safeguards to the public. These considerations may perhaps justify the great severity of even the modern law of forgery.

[For the present state of the law of forgery see Stephen, *Digest of the Criminal Law*, Arts. 355-366, and for its development see Stephen, *History of the Criminal Law*, vol. iii. pp. 180-188.] F. C. M.

FORMALEONI, VINCENZO (18th cent.), a man of much learning, born and lived at Venice.

Saggio sulla Nautica dei Veneziani, con una illustrazione di alcune carte idrografiche della Biblioteca di S. Marco in Venezia, dimostranti l'Isola Antille prima della scoperta di Cristoforo Colombo, Venezia, 1785 (translated into French by Chev. Dr. Hénier, Venice, 1788).—*Storia filosofica e politica della Navigazione, del commercio e delle colonie degli antichi, nel Mar Nero, Venezia, 1788* (id. id., Venice, 1791). A. B.

FORMARIAGE, DROIT DE. This was a feudal right of the French lords to exact a payment from a female serf when she married either a freeman or the serf of another lord. R. L.

FORONDA, VALENTIN DE. In his *Miscelánea* (Madrid, 1787), in his *Cartas sobre los asuntos mas exquisitos de la economía política*. (Letters on the most interesting questions of Political Economy) (Madrid, 1794), and in his *Cartas sobre la policía* (Letters on Policy). (Madrid, 1801). Foronda was one of the first to popularise the new economic ideas in Spain. He advocates commercial and industrial *laissez-faire*, and opposed all measures contrary to free trade, "the pole star which ought always to be kept in sight."

[Colmeiro's *Biblioteca de los Economistas Españoles*, p. 87.] E. Ca.

FORONDA, VALENTINO—name used by FABBRONI, GIOVANNI, in publishing his letters: *Della prosperità nazionale, dell' equilibrio del commercio e dell' istituzione delle dogane*, Firenze, Tofani, 1789. (v. T. I of the *Scritti di Publica Economia di Giovanni Fabbri*, pp. 83-110). A. B.

FORSTER, NATHANIEL, D.D. (1726 or 1727-1790), rector of All Saints, Colchester,

Besides some sermons and a pamphlet on Wilkes, he wrote *An Enquiry into the causes of the Present High Price of Provisions*, 1767, and an *Answer to Sir John Dalrymple's pamphlet upon the Exportation of Wool*, 1783. Perhaps the best parts of the *Enquiry* are the arguments against breeding horses instead of oxen for farm work, and an explanation of the effect of enclosures upon the price of pigs, poultry, and eggs. The economic arguments are weakened by his neglect of the rate of wages, and by his treatment of wealth and money as synonymous. In his pamphlet on wool he strongly objects to the exportation of raw wool, on account of home manufactures, which, he argues, would in consequence rise in price and be undersold by foreign goods.

[*European Magazine*, vol. xvii., 320.—*Dictionary of National Biography*.—McCulloch, *Literature of Political Economy*.] E. G. P.

FORTI, E., was, from 1875 to 1878, editor of the *Giornale degli Economisti*, at Padua, and a strong supporter of the "socialists of the chair."

L' Azione economica del Parlamento, dal 23 Nov. 1874 al 20 Giugno 1875, e dal 15 Nov. 1875 al 26 Luglio 1876.—*Giorn. degli Economisti*, Padova, 1875 e 1876. A. B.

FORTREY, SAMUEL (1622-1681), author of *England's Interest and Improvement consisting in the increase of the Store and Trade of this Kingdom*, Cambridge, 1663, was gentleman of the chamber to Charles II., clerk of the deliveries of the ordnance in the Tower, and a bailiff in the Corporation of the Great Level. He belonged to a family of Flemish refugees, who had settled as merchants in London. In his tract he writes in favour of immigration, inclosure, and a reform of the coinage, and urges that the king should set the fashion of preferring English-made goods to foreign manufactures, which should further be discouraged by high import duties. Subsequent mercantilist writers very frequently quoted an account which Fortrey says he obtained from a "particular not long since delivered in to the king of France." This gives a detailed list of the English imports into France, and the French exports to England, making the total value of the imports from England £1,000,000, and that of the exports to England £2,600,000. Fortrey and his followers concluded that this showed that England lost £1,600,000 a year by her trade with France. The tract was reprinted in 1673, 1713, 1744, in Whitworth's *Tracts on Trade and Commerce*, 1778, and in Lord Overstone's *Select Tracts* (vol. on "Commerce") 1856.

[*Dictionary of National Biography*.] E. C.

FORTUNATO, NICOLÒ (living at Naples in end of 18th century), was one of those writers who, after studying carefully the evils then afflicting the kingdom of Naples, and the true sources of its wealth, pointed out the proper remedies and the way in which to put theory

into practice. According to him economics are a part of philosophy, and may be divided between public economy (proper to a prince), and private (proper to families), which is limited to individuals. Fortunato dwelt on the true sources of public wealth, pointing out England as the example in this, the principles of economic science being well known there, and practised by the encouragement of agriculture, by permitting free exports of produce, by keeping the carrying trade to the national shipping, etc. He criticised the system of taxation then maintained in the kingdom of Naples, and proposed an equitable basis of custom-house duties, the abolition of internal tolls, and a uniform assessment for the taxes. He showed the necessity of a census of the population, and supported—like Gianni and Neri in Tuscany, though less fortunate than they, as they saw their ideas put into practice—the free export of corn.

Riflessioni intorno al commercio antico e moderno del Regno di Napoli, di Nicola Fortunato, Napoli, 1760. A. B.

FORTUNE, E. F. THOMAS, stockbroker, author of *Epitome of the Stocks and Public Funds*, 1796, which ran to seventeen editions; of *A Concise and Authentic History of the Bank of England, with Dissertations on Metals and Coin, Bank Notes and Bills of Exchange*, 1797 (translated into French 1798? a third edition issued in 1802) intended to defend the bank against adverse rumours caused by a temporary stoppage of cash payments ordered by government and sanctioned by parliament; and of *National Life Annuities, comprising all the Tables and every necessary information contained in the act of Parliament for granting the same*, 1808.

[*Brit. Mus. Catalogue*.—*Biographical Dictionary of Living Authors*, 1816.] E. G. P.

FOSSOMBRONI, VITTORIO, Count (about 1800), professor in the university of Pavia.

Idee sui vincoli commerciali. Lettera d' un professore dell' Università di Pavia (1 Giugno 1804). (v. Fabroni's *Scritti*, etc., pp. 336-417.) A. B.

FOSTER, JOHN LESLIE (d. 1842), grandson of Anthony Foster, lord chief baron of Ireland, was an Irish judge, and member of parliament on the Tory side for Dublin University 1807-1812, for Yarmouth, Isle of Wight, 1816, for Armagh 1818-1820, for Louth 1824, 1826. He spoke frequently (see Hansard under above years) chiefly on Irish subjects, such as Catholic Relief, Irish Grand Juries, and the Irish Insurrection Bill. He wrote an *Essay on the Principle of Commercial Exchanges, more particularly on the Relations between England and Ireland*, 1804. Through an argument against the old theory that the wealth of a nation is proportionate to the excess of its exports over its imports, in which he shows that the balance of debt is distinct from the balance of trade, he

proceeds to a discussion of the financial relations then subsisting between England and Ireland; he describes, in an original way, the loss suffered by Ireland through remittances to absentees and the interest of her debt payable in England, which caused an increase of imports and a decrease of exports; and he concludes with an argument to show that the rate of exchange does not depend on the balance of debt but on the cost of transmitting specie, and with a description of the monetary evils caused by bank restriction. The first chapter treats of the general principles governing the balance of trade, showing that foreign expenditure and other international financial relations help to produce the balance of debt of which the balance of trade forms only a part, if the larger part; that the balance of trade, whether favourable or unfavourable, can never be permanent, as the varying value of the circulating medium, which is here treated on the same footing as any other commodity, will always restore the equilibrium. The old theory that the wealth of a nation is proportionate to the excess of exports over imports is replaced by an argument to show that such excess is a loss to the nation, being the payment without return for foreign expenditure. The following proposition sums up the argument: "If the exports to all the world could be added to the amount of specie exported, they would be found equal to the amount of imports and of foreign expenditure." The rest of the essay is devoted to the financial relations of Ireland with England, and deals less with general principles than with existing facts. Ireland's foreign expenditure is shown to be a loss to her: remittances to absentees cause industry, but, the produce of this industry being exported without return, Ireland, though not being ruined, cannot accumulate capital but spends her savings on the absentees; while the raising of Irish loans in England interferes, by introducing an unnatural supply of specie into Ireland, with the natural relation between exports and imports and specie. Irish imports are increased and exports diminished in proportion to the balance of debt. The effects of bank restriction are then adversely discussed, and the rates of exchange explained as depending on the cost of transmitting specie, not, as hitherto generally believed, on the balance of debt. In the case of Ireland the rate of exchange is unfavourable, owing to English trade regulations which increase the cost of transmission, though the balance of debt is favourable. The essay closes with a detailed view of the causes of and the remedies for the excessive issue of paper money in Ireland, shows that only inconvertible paper can be issued in excess, and recommends the regulation of the issue by law. The whole essay is distinguished by clearness of style, by lucid reasoning, and by enlightened views.

[*Times*, July 13, 1842.—See M'Culloch's

Literature of Political Economy for notice of remarks on Irish absentees.] E. G. P.

FOSTERLAND. Land set apart to provide a sustenance for a particular person or persons. [COWEL's *Interpreter*.] A. R. S.

FOTHER. See MEASURES AND WEIGHTS.

FOUAGE, or FEUAGE, the French equivalent of our hearth-tax. The most famous, though not the earliest, imposition of this tax was under Charles V., when it provoked numerous revolts, and Charles was induced to abolish it on his deathbed. But the *fouage* remained a provincial impost in Brittany, and the extraordinary injustice of its assessment was the great subject of discussion at the meeting of estates of Brittany in 1788, where, according to some writers, the Revolution really began.

[For the *fouage* in Brittany, see Bertrand de Moleville, *Mémoires Particuliers*, i. p. 36.]

R. L.

FOUCQUET, NICOLAS (1615-1680), began public life under the auspices of Richelieu, and, after the death of the Cardinal, continued to enjoy the protection of his successor Mazarin, and was created Marquis of Belle Isle. He was successively made minister of state, superintendent of finance, and general attorney in the parliament of Paris; finally he was arrested in 1661 on a charge of embezzlement. The question of his culpability is doubtful: he had incurred the persistent aversion of Louis XIV., acting under the hostile influence of Colbert, and was sentenced to the confiscation of all his property and to perpetual banishment, which the king "commuted" into perpetual confinement. Foucquet died in 1680, after fifteen years' captivity, during which he composed several works of piety and the *Défenses de M. Foucquet* (15 vols. 1665-1667). Some of his old friends, among others La Fontaine and Madame de Sévigné, remained faithful to him until the end.

The study of his trial is interesting on account of the light it sheds on the management, and also the mismanagement, of French finance under Louis XIV.

[Chérel, *Mémoires sur la vie publique et privée de Fouquet* 2 vols.—Pierre Clément, *Histoire de Colbert*.—Nicolas Foucquet (2 vols. 1890) by M. Lair, who has printed several unpublished documents on this subject. A very complete account, based on M. Lair's book, will be found in the *Revue des Deux Mondes* (1st and 15th December 1890).] E. ca.

FOUNDLING HOSPITALS. These institutions illustrate the dangers of attempting to gratify charitable impulses without due regard to consequences. Foundling hospitals relieve after more or less of inquiry, and with more or less of restriction, children whose parents cannot or will not support them. Sometimes they are voluntary institutions, sometimes maintained and directed by the state, sometimes they receive only illegitimate children, as is

the case with the Foundling Hospital in London, sometimes children born in wedlock as well. Their object is threefold, viz. (1) that child-murder and exposure may be prevented, as being without excuse; (2) that a better training and education may be given to the children than would be given by the parents; (3) that a retreat may be found for the victims of seduction. What are their effects?

Malthus has pointed out the excessive mortality which the system occasions. He found that in the *Maison des Enfants Trouvés* at St. Petersburg, in spite of every precaution, the number of deaths was almost incredibly high. At the London Foundling Hospital, in the middle of the last century, the system was adopted of taking all comers; as a result, in a little less than four years 14,934 were received, of whom but 4400 lived to be apprenticed; and, as a further result, large numbers died whilst being carried to the hospital from every part of England by unscrupulous contractors. The same writer has shown that they infallibly give encouragement to vice. Not only do they remove one of the most powerful motives to conduct, viz. a dread of public opinion, but they also guarantee an escape from the responsibilities of paternity; thus marriage is discouraged and illicit unions are encouraged. Lastly, they help to lower wages, "by artificially increasing the number of apprentices," for "the demand for labour among the legitimate part of the society must be proportionally diminished, the difficulty of supporting a family increased, and the best encouragement to marriage removed." In answer to the argument that they diminish exposure and infanticide, Malthus remarks, "An occasional child-murder from false shame is saved at a very high price, if it can only be done by the sacrifice of some of the best and most useful feelings of the human heart, in a great part of the nation."

These criticisms on a system of foundling hospitals are borne out by a consideration of the history of these institutions in England and France. The London Foundling Hospital was established in 1741 by Captain Coram for the "maintenance and education of exposed and deserted young children." At first admission was restricted owing to want of funds, but by a resolution of parliament, 5th April 1756, the maintenance of the hospital was undertaken by the nation, and the gates were thrown open to receive all children who should be offered. On the first day 117 were admitted, in the next three years and ten months no fewer than 14,934, at the end of which time parliament withdrew its subsidy. The present practice of the hospital is to admit only illegitimate children, under one year old, who are not paupers, are the first-born of their mothers, and whose fathers are unknown or not, from

whatever cause, liable for their maintenance. A total of 504 children is received, of whom the younger are put out to nurse in the country, and 330 are educated in the hospital itself.

France differs from England, fundamentally, in the fact that desertion is not an offence in that country, unless it be accompanied by injury or risk to the child. By the decree of 18th January 1811, every *arrondissement* was to contain a *hospice* for foundlings, and to every *hospice* was to be attached one of the famous *tours* for their reception. In these *tours* any child might be placed without risk of identification, and become henceforward the ward of the state. As a result, in 1833 no fewer than 136,943 children were maintained at the public expense, which led to successive acts of the legislature reducing the number of *tours*, and the facilities for desertion, till in 1858 the figure stood at 76,520. The *tours* are now abolished, but all children are received *à bureau ouvert* without restriction.

[The criticisms of Malthus may be seen in his *Principles of Population*.—The *History of the London Foundling Hospital* has been written by Brownlow (1858).—The various provisions, etc., for *Enfants Trouvés* in France are set forth in *Régime et Législation de l'Assistance Publique et Privée en France*, by Léon Béquet, *Die Armenangelegenheit Frankreichs*, by the Freiherr v. Reitzenstein (Schmoller's *Staats- und sozialwissenschaftliche Forschungen*, vi. 4), and *Législation Charitable*, by A. de Watteville.]

L. R. F.

FOURIER, CHARLES (1772-1837) born at Besançon, died at Paris. He was one of the best-known French socialists, the founder of the school which takes its name from him (*École fouriériste sociale ou phalanstérienne*). Personally he was mild and sympathetic, possessing a singularly rich vein of imagination. His father was a linen-draper, and he himself was ruined when the city of Lyons was besieged by Chalier in October 1793. He had joined, like Jacquard, the army of the Count de Pécay, who defended that city against the Convention. Fourier was fortunate enough to escape the scaffold, but he had to enlist, and passed two years under the colours. Having retired from active service, he started in life afresh in 1799, at Marseilles, as a commercial traveller attached to a house of business, and after that time was never out of employment, though this might be in a very humble capacity, living in the most quiet manner, his only amusements being the dreams on which the doctrines of his school were based. Fourier's disposition was gentle and conciliatory, and though his system might call up a smile, it never provoked hostility either before or after his death. Fourier commenced thinking out his system as early as 1799, but it was not till 1808 that his first work, a single volume in 8vo, appeared, entitled *Théorie des quatre mouvements et des destinées générales* (2nd ed. 1841). This

contains what he proudly called his discovery. He sets forth in this that our planet is destined to exist for 80,000 years, of which 40,000 are occupied with ascending, and 40,000 equally with descending vibrations. The first 5000 years are occupied with the movement upwards out of chaos. They contain seven successive periods of retrogression: (a) the series of confusion (shadowing—happiness); (b) the savage state; (c) the patriarchal; (d) barbarism—of progress; (e) civilisation (that in which we live); (f) *garantisme* (a state in which we are under protection); finally (g) series merely sketched out (the twilight of happiness). The 35,000 years which follow are designated “the ascending harmonies.” They contain nine periods: first, the series of simple combinations (the dawn of happiness); then seven composite ascending series; finally, one entitled “First septigenesic creation, advancing to perfection.” The world will then enter (in 35,000 or 38,000 years) into the *apogee* of happiness. This is to last about 8000 years. After this the descending period (40,000 years) is to commence, which is to be passed through in an order symmetrically corresponding with the ascending period. Then the author, with a boldness of conception which disdains to indicate the course of the investigations which led him to this marvellous discovery, foresees, in an epoch comparatively nearer to our own, that is to say about 10,000 years distant, the advent of a “Northern Crown” (resembling the ring of Saturn) which, “through the influence of this crown, will usher in the disinfecting the oceans, and the perfuming them by means of the boreal fluid and an aromatic dew.” This blessed result will last about 40,000 years, for the author, whose exactness is most conscientious, lets us know that all these figures respecting periods are based on the division of the whole into eighths. It is true that when the 40,000 years of the ascending period are added to the 40,000 years of the descending period, the 8000 years which form “a central or amphiharmonic period,” and occupy the very centre of the existence of the earth, are omitted. It is indeed sad that this should be the case, for this period, 8000 years of perfect felicity, is the apogee of happiness.

But all will desire to know what the four Movements are which Fourier indicates. These are “the social, the animal, the organic, and the material.” Ten years later Fourier perceived that he had omitted one, which he describes as “the Aromatic,” that is to say, “the system of the distribution of the aromas which sway men and animals, and form the germs of winds and epidemics, governing the sexual relations of the stars, and furnishing the specific characters of the different species.” It should not be forgotten that Fourier regards the stars as having a life of their own. They are

born and die. The moon is a dead planet, a corpse. Our own planet, as has been seen, will live for 80,000 years (more or less, within an eighth) and then will die. Fourier explains the way the stars come into existence in a note. A star may be generated: (1) Self-generated from a simple star through its north and south poles; (2) from another star through the contrasting poles; (3) from intermediaries, as the tuberoses comes into existence from three aromas (*Terre-sud, Herschell-nord, and Soleil-sud*). To return to our poor planet which has to wait 38,000 years for complete happiness. The most eminent disciples of Fourier (V. Considérant, H. Renaud, and Hennequin, for example) have not followed him in his description of the future of the universe. They have contented themselves with accepting the organisation of society heralded by their leader. What is this organisation of society? Fourier starts from the position that neither passions nor inclinations are evil in themselves. What renders them so is the medium through which they develop. In a complete condition of harmony—it is thus that Fourier designates the final end to be attained—every passion will contribute its share to the general good, a prosperity so perfect that those who are the most difficult to please will be satisfied a hundredfold. In his system there is no appeal to self-devotion, but to the most unrestrained desires, to the most unbridled passions. Men and women are to be classified in accordance with their inclinations. Fourier expects to raise work from mere drudgery, as it is under our miserable state of civilisation, to being pleasant and attractive. To attain this he would have for the motive-power, not a sense of duty, nor even self-interest, but the passions. If every one only works as his fancy and his inclinations lead him all will be well. In order to reach this result he divides the workers into series and groups, and utilises their defects. Even their vices become, when arranged in harmony, useful stimulants. It would be somewhat tedious to follow Fourier through all the details of an organisation of society which, while most original, yet unfortunately panders to the physical appetites in a manner which renders his writings sometimes of dubious propriety. He extends the idea of the family in a singular manner. Thus a woman was to be allowed several husbands—a spouse, a father to her children, and a favourite, besides mere possessors—under different titles and with different rights, but all variable, according to taste or caprice. The man also is not in these matters bound to a very strict life. According to Fourier this liberty of love is to make an end to the vice and the hypocrisy of our civilisation. But would not this condition of things be itself a state of vice? According to our socialist this would not be the case, for in the state of harmony that which is vice to us

becomes virtue, and *vice versa*. As will be seen, Fourier has treated morality in the same easy-going style that he has treated natural science.

From the point of view of an economist and an administrator, Fourier organises the *Phalange*, which was to take the place of the *Commune*. The *Phalange* has for its centre (dwelling, workshop, school, town hall, and everything else) the *Phalanstery*, in which a life in common is carried on under certain rules which recall those of our early monasteries. The workers of each phalange, divided into series, groups, or sub-groups, according to their inclinations, are to go out to work as soldiers go out to drill. The individual disappears, and is replaced by the groups. Thanks to this marvellous organisation which through its perfection foresees everything, and provides for every want, prosperity replaces poverty, cheerfulness replaces all cares and troubles, good order and morality, as interpreted by Fourier, vice and crime. The chief of each phalange is entitled the *Unarque*; three or four phalanges when united are placed under the charge of a *Duarque*, twelve phalanges under that of *Triarque*, and thus onwards to *Tetrarques*, *Pentarques*, *Écarques*, up to the *Omniarque* who governs the entire system of the phalanges (Fourier makes their number 2,985,984, neither more nor less). The omniarch is the sole ruler of our globe, and decides to live at Constantinople, which is to become the capital city of this world. He has to look after all these dignitaries, both small and great, the elected commissioners, etc. etc. The group or sub-group ought to be composed of at least nine persons; the series includes from twenty-four to thirty-two groups or sub-groups. The number of the series of each phalange is not fixed. In this happy community there are neither to be courts of justice nor judges. How could these be needed since every error or crime, as we might term it, is a useful motive power. There is to be a division of profits in each phalange, as profits are to reach the consumer by means of exchanges, and not through any authoritative distribution. Capital is to be preserved in this stage, and the profits in the phalanges to go by shares. The division was to be between capital four-twelfths, labour five-twelfths, and ability three-twelfths. But how can consumption regulate production in this medium in which there is nothing to direct any one to useful labour except his instincts, his feelings, or his passions? Fourier has omitted to inform us. One has to feel that in working through all this detail our author has never troubled himself about any crisis, whether caused by Man or Nature. All that we have stated and a vast deal more is to be found with but few exceptions in the work he wrote when launching his scheme, which bears the title of the *Théorie des quatre mouvements*.

[Fourier, however, went into more circumstantial details in other works, as *Le traité de l'association domestique agricole ou attraction industrielle*, 2 vols. 8vo, 1822; reprinted in 1841-43 in 4 volumes under the title of *Théorie de l'unité universelle, Le nouveau monde industriel et sociétaire* etc., 1 vol. 8vo, 1829. Two other editions have followed, the last (the 3rd) in 1848.—*Pièges et charlatanisme des sectes de Saint Simon et d'Owen*, 8vo, 1831, and finally *La fausse industrie morcelée, répugnante, mensongère, et l'antidote l'industrie naturelle, combinée, attrayante, véridique*, etc., 1835-36, 1 vol. of 840 pages. Periodical journals were also established to spread a knowledge of the societary doctrine. (1) *Le Phalanstère*, 1832-34, which became (2) *La Phalange*, 1835-1843, transformed after the death of Fourier into (3) *La démocratie pacifique*. This was the best known of all. It was suppressed by the *coup d'état* of 2nd December 1851. Fourier has been followed by many disciples both in France and in other countries, and a larger number still have adopted his ideas of social organisation. The best known of these is M. Victor Considérant, still vigorous at the age of eighty-five (written in 1893), hardy mountaineer as he is. All of Fourier's disciples have followed peaceful methods of propagating their ideas, and like their master, have lived generally respected. Attempts to establish phalansteries have been made at various times, but without success. At Condé-sur-Vesgres, and in 1832-33 at the expense of MM. Baudet-Dudlary and Devay brothers, who were disciples of the school, at Cîteaux, in the buildings of the old abbey (a good choice so far). This last effort, under the guidance and at the expense of the brothers Young, was made in Algeria, l'Union du Sig, which afterwards was transformed into an ordinary business enterprise. In Texas, the colony was under the management of M. Victor Considérant. The *FAMILISTÈRE* (*q.v.*) at Guise borrows part of its regulations from Fourier. But these appear to be based on those laws which Fourier in his turn had borrowed from that natural organisation which political economy describes, see Ch. Gide's "Charles Fourier" in Guillaumin's *Petite Bibliothèque Écon.*; also J. S. Mill's *Principles of Pol. Econ.*, vol. i. bk. ii. chap. i. §§ 3, 4.] A. C. F.

"Communism," Professor H. Sidgwick remarks (*Principles of Pol. Econ.*, bk. iii. ch. vii.), "is generally regarded as an extreme form of socialism, in which the most thoroughgoing antagonism to the institution of private property is manifested. . . . The proposal to organise society on a communistic plan, so as to distribute the annual produce of the labour and capital of the community either in equal shares, or in shares varying not according to the deserts, but according to the needs of the recipient, is one of which the serious interest has now passed away; though a generation ago it had not a few adherents, and was supported with earnestness and ability by more than one competent writer."

FOURPENCE OR GROAT. The first English silver coin of greater value than the penny; called a groat or grosse because of its size.

Reign.	Year.	Weight grains.	Finesness.	Value.	
				In silver 925 fine at 5/6 an ounce.	In silver francs 900 fine.
Edward III.	1351	72	925	d.	franc
Henry IV.	1412	60	"	10	·96
Edward IV.	1464	48	"	8½	·80
Henry VIII.	1527	42·5	"	6½	·64
Do.	1543	40	"	5½	·57
Mary	1553	32	"	5	·53
Elizabeth	1601	31	"	4½	·43
Charles II.	1663	Discontinued			
Victoria	1836	Recommenced			
Do.	1836	29·09	925	4	·39
Do.	1856	Again discontinued			
Do.	1858	Struck for use in the Colony of British Guiana only			
Do.	1891	Special coinage bearing the inscription "British Guiana and West Indies."			
Edward VII.	1903				

Groats struck at the present time bear the word "Fourpence" on the reverse. The coinage of Maundy fourpences was not discontinued in 1663, but these coins have been struck each year from that date till the present time (1906). F. E. A.

FRACHETTA, GIROLAMO (16th century), a statesman who, writing on financial matters, in reference to the duties of a ruler, considers it incumbent on him "to maintain abundance." He argued that for this purpose the nobility should bear their share of the public burdens, contributing, proportionately to their wealth, to the taxes paid by the common people.

Il Principe, di Girolamo Frachetta, 1597, Venetia. 2^a ediz. riveduta et in molti luoghi ampliata dall' autore medesimo, Venetia, 1599. 3^a ediz. 1647. A. B.

FRACTIONAL CURRENCY. In countries using metallic currency, a considerable supply of small change is required in order to carry on the daily transactions of retail trade. This want is generally met by the use of token coins, authorised by law to be received as equal to a certain fraction of the standard of value, although not actually worth so much. Such coins are usually legal tender for comparatively small sums only (e.g. British silver coins are not legal tender for a greater sum than 40s.), and are occasionally limited in number to so many per head of the population. Fractional coins need not necessarily be mere tokens, and, indeed, are not always such; but in view of the fact that they are only required for convenience in conducting small transactions within the country of their issue, and are not used internationally, there does not appear to be sufficient reason for losing the profit which accrues on the issue of tokens (see BILLON).

F. E. A.

FRANC, HISTORY OF. The origin of this name, as applied to a coin, is derived from the striking of a gold coin in 1360, on which was represented the king, John II., *the Good*, on horseback, with the legend *Johannes Dei gracia*

Francorum Rex. These *francs à cheval*, as they were called, disappear after the middle of the 15th century. The *franc d'argent* from the first was equivalent to the *livre tournois*, and was worth twenty sous. French writers use the terms *francs* and *livres* almost without distinction, except that usage prescribed the use of *francs* only for even sums. It was possible to say either quatre francs or quatre livres, but not to say quatre francs cinq sols (now sous), the correct phrase being quatre livres cinq sols. The modern franc is the unit of the decimal coinage of France and the Latin Union.

R. L.

FRANC, COIN. The unit of value, as well as the money of account, in the countries forming the Latin monetary union is, in France, Belgium, and Switzerland, called the franc. In Italy it bears the name lire, and in Greece drachma. The franc is divided into 100 centimes, the lire into 100 centesimi, and the drachma into 100 lepta.

The franc may consist of either 4·98 grains of gold 900 fine, or 77·16 grains of silver of the same fineness; the ratio between gold and silver being thus taken at 15½:1.

The value of the gold franc in sterling (gold 916·6 fine at £3:17:10½ an oz.), 9·52d. That of the silver franc is in English standard silver (925 fine at 5s. 6d. an oz.) 10·32d.; but with silver at the price of 30½d. per ounce (January 1906) the melting value of a standard silver franc is slightly less than 4·8d.

There is no standard French coin of the value of one franc, the silver coin bearing that name being a token composed of silver 835 fine, and of the value only of ·93 of a standard silver franc.

The smallest standard coin in gold, and the only one in silver, is of the value of five francs.

F. E. A.

FRANCE, BANK OF. See BANKS.

FRANCFIEF, DROIT DE. This was a payment made by a ROTURIER (*q.v.*) on acquiring lands previously held by a noble. The payment was originally made to the immediate lord, but in the 14th century it was claimed by the crown, and henceforth forms part of the domain revenue. The *droit de francfief* was of great importance in emphasising and maintaining the rigid division of classes in France.

[De Tocqueville, *L'Ancien Régime*.] R. L.

FRANCHI, CARLO (end of 18th century), a Neapolitan lawyer. There had been much discussion in the kingdom of Naples about redeeming the *arrendamenti*—that is, the public income, which had formerly been given to the creditors of the state. This transaction—which would now be termed a conversion of the public debt—had been proposed already by Pompeo NERI in Tuscany, and steps had been taken towards it in the kingdom of Naples by the institution of a council (*Giunta per la*

ricompera degli arrendamenti, 1751), which proposed to reduce the interest to 4 per cent, or to pay off the money lent, principal and interest, with 7 per cent. The latter proposal was accepted, but many difficulties arose about the redemption of taxes; for, as the creditors had received these as their absolute property, they denied the right to take them back. Legal proceedings followed; and it was only in 1753 that the tribunal pronounced a judgment in favour of the government. During this BROGGIA proposed redemption at the current price, which was below the original one. On the other hand, Franchi strenuously defended the creditors in a memoir which Cossa thinks superior for its style to that of Broggia (*Introduzione allo studio dell' Economia Politica*, 1892, p. 251).

[*Memoria da umiliarsi a S. Maestà, in nome dei consegnatori dell' arrendamento dei Sali di Puglia, 1750.*] A. B.

FRANCHISE. (a) Any privilege granted by the crown to exercise a right not otherwise exercisable by a subject, e.g. the right to have a forest or the right of manorial jurisdiction. The most conspicuous franchise in modern times is the right to hold a market (see MARKET). Franchises are termed "incorporeal hereditaments." (b) The right to vote at parliamentary elections. The parliamentary franchise in the United Kingdom has been simplified by the Representation of the People Act of 1884, but is still very complicated. The great bulk of the population vote as householders or lodgers in boroughs or counties. In England a person not otherwise disqualified is entitled to be put on the register as voter in respect of the household franchise:

- (1) If he has for twelve calendar months before 31st July in the year in which he claims to be placed on the list, been a resident occupier, as owner or tenant, or by virtue of any office or employment of any dwelling-house within the borough or county for which he claims a vote;
- (2) If the premises so occupied have been rated to the poor rate during the time of such occupation;
- (3) If the rates payable up to the preceding 5th January have been paid before 20th July of the same year.

Any person not otherwise disqualified is in England entitled to be placed on the register as a lodger if he has for twelve calendar months before the 31st July resided in lodgings in the same house within the borough or county for which he claims a vote, such lodgings being, if occupied by the claimant alone, of the yearly value of £10 (if let unfurnished), and if occupied by the claimant jointly with others, of a yearly value equal to £10 for each lodger (if let unfurnished).

The household and lodger qualifications in Scotland and Ireland are of a similar nature.

Besides this franchise which depends on residence, there is one which depends on occupation of any land or house or part of a house of a clear yearly value of not less than £10—within the borough or county. The conditions as to time of occupation and payment of rates are similar to those to which the household franchise is subject. In English and Scotch boroughs residence within seven miles of the borough is a further condition, but in counties throughout the United Kingdom and in Irish boroughs no condition as to residence is attached to the occupation franchise.

Another kind of franchise is the property franchise, which depends on the ownership of land irrespectively of occupation or residence. The land in respect of which the right is available may be freehold, copyhold, or leasehold; but as regards the last mentioned kind of property the original length of the lease must have been at least fourteen years in Ireland, nineteen years in Scotland, and twenty years in England. The conditions as to yearly value vary between £2 and £5 in the case of freeholds; between £5 and £10 in the case of long leases, and between £20 and £50 in the case of short leases. The ownership of a rent-charge does not, since 1884, entitle to a vote, and in the case of joint tenants only one is now entitled to be placed on the register. In this way two easy methods of creating faggot votes have ceased to be available.

In addition to these general franchises some special franchises exist, viz. the franchise of the freemen or burgesses in certain ancient boroughs, and the university franchise.

In all cases the franchise is confined to adult men who are British subjects. Peers and certain public officers are disqualified, as well as convicts and persons in receipt of parochial relief other than surgical or medical assistance. Persons guilty of certain offences under the Corrupt Practices Act may be disenfranchised for a period which varies according to the nature of the offence.

There are substantial reasons for the agitation for a removal of the numerous anomalies connected with the parliamentary franchise, and much can be said for the principle embodied in the maxim "one man one vote." The usual argument that the present system gives a certain preponderance to property and education which it would be undesirable to remove, is open to many objections. As regards property it will be seen that only landed property is favoured, and only such landed property as happens to be situated in districts in which the owner does not reside. As regards education it is very doubtful whether it has any advantage under the present system. Considering how long education has been compulsory, it is now time for the "illiterate voter" to be removed from the register. As a general rule men belonging

to the educated classes become householders much later in life than uneducated persons, and if they carry on any profession or business, it depends on merely accidental circumstances whether they have one vote or several votes or none at all. A barrister, not otherwise qualified, who has chambers in Lincoln's Inn and resides in Kensington, has two votes; one who resides in Richmond has only one vote; and one who during the summer months has lodgings in Richmond and during the winter months lodges in Kensington can take no part in parliamentary elections. A small tradesman may have a vote in respect of his place of business, and if he has shops in several districts, may have a number of votes, but the manager of a large joint-stock company has no similar privilege. A country banker not otherwise qualified, whose residence is within the borough in which his bank is situated, has one vote; if he lives outside the borough but less than seven miles away from it he has two, if more than seven miles one. Similar instances showing that electoral power does not depend on education may be easily multiplied, and prove that the demand for further reform is not unreasonable. But the maxim "one vote one value" is closely connected with "one man one vote" and the consideration of this would take us beyond the limits to which this notice must be confined.

The qualifications for the franchise in continental countries vary considerably. In several countries the upper house is elective as well as the lower house, and the voters for the first-named chamber are taken from a more limited sphere than those for the other house: this was the plan adopted by Mr. Gladstone in his Home Rule Bill of 1893. By the new Belgian Constitution universal franchise is recognised, but certain classes of voters are to have a larger voting power. The German Reichstag is elected by universal suffrage—every male person having attained the age of twenty-five has a vote—but in the individual German states the franchise varies. In Prussia the voters are divided into three classes according to the taxes which they pay; each class elects an equal number of electors, and a majority of the chosen electors elect the members. As the first class is naturally much less numerous than the second, and the second less numerous than the third, a considerable advantage is given to the wealthier classes.

[Anson, *Law and Custom of the Constitution*, vol. i. pp. 89-112.]

H. S.

FRANCIS, JOHN (1810-1886), entered the service of the bank of England 1833, became chief accountant 1870, retired 1875. Francis was author of the works named below, which form rather anecdotic than historical contributions to the analysis of the economic "anatomy" of the middle of the 19th century. In (a) the

writer introduces his main inquiry by a sketch of the history of interest and banking; in (b) he gives an outline of financial history and speculation, and describes the establishment and growth of the royal and stock exchanges; (c) is both historical and statistical; (d) includes a history of the practice of life assurance from Roman times, with some account of the origins of statistical science and of the modern application of the theory of probabilities to vital statistics.

(a) *History of the Bank of England; its Times and Traditions*, London, 1848.—(b) *Chronicles and Characters of the Stock Exchange*, London, 1849.—(c) *A History of the English Railway; its social Relations and Revelations*, 1820-1845, London, 1851.—(d) *Annals, Anecdotes, and Legends: a Chronicle of Life Assurance*, London, 1853.

C. A. F.

FRANCIS, PHILIP (1740-1818). Francis, son of the translator of Horace, was born at Dublin, educated in England first by his father, and then (1753-56) at St. Paul's school; went from school to a clerkship in a government office; was private secretary to General Bligh in the expedition to Cherbourg, 1758, and secretary of the embassy to Portugal, 1760. In 1762, Townshend procured him a clerkship in the war office, and he then began his career as a political writer. *The Letters of Junius*, which appeared 1769 to 1772, are now generally acknowledged to be his. In 1773 he went to India as member of the council of Bengal, and distinguished himself by persistent opposition to Warren Hastings. Returning in 1780, he represented Yarmouth (Isle of Wight), and sided with the opposition. He took a keen interest, if not an active part, in politics, even to the latest years of his life.

If we except the few remarks in the first Letter of Junius (*To the Printer of the Public Advertiser*, 21st January 1769), on the Public Debt, and Public Lotteries, there is little or nothing of economics in the famous *Letters*. Francis appears as an economist first (a) in a Letter to Sir James Stewart on the *Indian Currency*, dated Calcutta, 20th November 1776, and published in vol. v. of *Stewart's Collected Works*, ed. 1805, pp. 121-133. "On the 30th August 1771, Warren Hastings ordered that rupees of the eleventh, twelfth, and fifteenth years of Shah-Alam should pass on an equality with those of the nineteenth, and that thereafter all future issues should bear this date" (Mr. F. C. Harrison in *Econ. Journal*, 1893, p. 53). Stewart had communicated his opinion on this measure to the council; and Francis defends the decision of the council. In 1810 (b) Francis published his *Reflections on the Abundance of Paper in Circulation, and the Scarcity of Specie*, with the motto, "*Ad tempora quibus nec vitia nostra nec remedia pati possumus parventum est.*" He writes before the report of the bullion committee (June 1810).

He describes the disease; there is hardly any gold coin in the country; it has all gone to pay our foreign creditors. Indeed there is hardly any silver coin. "There is none other than that of Birmingham for common change, and lately a few dollars. . . . They are all alike birds of passage. A lame dollar [slow to fly] will be as much a curiosity as a woodcock in August, for the dollars go just like the guineas" (p. 23). In spite of bank notes, we are falling into bankruptcy and beggary.

Where is the remedy? There is none but a change of regimen. We must stop our foreign expenses, and give up useless wars like that in defence of Portugal (26, 27), and dismiss our present ministers, under whom "peace is not to be had with honour and security" (28).

He fortifies his position by quotations from Locke, from Sir John Moore's dispatches, and from a speech of his own on "the exorbitant paper circulation," delivered in the House of Commons, 31st March 1806. "Though it has been long in print, I see no reason to suspect that anybody has hitherto perused it but myself" (p. 41). It is worth noting, that in the said speech he had quoted from his old correspondent Steuart, on French Finance (p. 42). J. B.

The work of PINTO (*q.v.*) on *Circulation and Credit* was translated in 1774 by "Rev. S. Baggs," a pseudonym for Philip Francis, who feared by using his own name to offend Lord North and the ministry, and therefore borrowed his cousin's (M'Culloch, *Catalogue of the Library of a Political Economist*, 1862, p. 280. M'Culloch's authority is Joseph Parker).

FRANKALMOIGN, or *libera elemosyna*, was applied, not to clerical tenure in general, but to a particular kind of it. A tenant held land in frankalmoign, when he was bound to say masses for the donor and his family, but was freed from the ordinary incidents of lay tenure. Frankalmoign corresponds somewhat to lay tenure by serjeanty, and both were maintained by the statute of 1660, which abolished feudal incidents (Kenelm Digby, *Hist. of Law of Real Property*, 1884). (See FREEHOLD.) R. L.

FRANKLIN, BENJAMIN (1706-1790), was a son of Josiah Franklin, a tallow chandler of Boston, Massachusetts. He was apprenticed to the printing business at the age of thirteen, but, restless and ambitious, he sought, in 1723, against his father's will, his fortunes in Philadelphia. In 1729 he established a newspaper, and soon became a leading spirit in colonial affairs. From 1736 to 1749 he was clerk to the General Assembly; in 1737 he was appointed postmaster of Philadelphia, and in 1753 postmaster-general of the colonies. In 1754 he drew up a plan of union of the colonies, which, however, was not ratified. He was repeatedly engaged in diplomatic service, especially in France, both before and during the revolution of 1789.

Throughout his life Franklin contributed to newspapers essays on moral, philosophical, and political topics. Indolent, though fond of public affairs, he never devoted himself earnestly or persistently to any one department of knowledge, or he would undoubtedly have made a marked name in literature. On the subjects of commerce and money he displayed considerable originality. In 1729 he wrote *A Modest Inquiry into the Nature and Necessity of a Paper Currency*, in which he favoured an issue of paper money based upon land—a contribution to the land-bank controversy of the period. The security of these bills would constantly improve as the increase of population would cause the land to rise in value. This first essay was followed by many others.

Although he confused capital and money he understood quite clearly the essential uses of the latter: "Money as a currency has an additional value by so much time and labour as it saves in the exchange of commodities." When he emphasised the advantages of a paper currency he had in mind paper money which was "well founded." In the latter part of his life he opposed the bill favoured by Congress authorising the first issue of bills of credit, and afterwards urged the substitution of loans. He favoured freedom of trade, deplored the evils of the mercantile system, and declared that industry is stimulated afresh when a country has to an inconvenient degree parted with its gold and silver. In the judgment of Dugald Stewart, "the expressions *laissez-faire* and *pas trop gouverner* are indebted chiefly for their extensive circulation to the short and luminous comments of Franklin, which had so extraordinary an influence on public opinion both in the old and new world." The circulation of his views on trade and industry was largely aided by the publication of *Richard's Almanac*, beginning in 1732. He reflected with more than usual acuteness upon the laws of population, and perceived that population was limited by definite checks; see *Observations concerning the Increase of Mankind, Peopling of Countries*, etc., 1751. He was the first to estimate that the population of the American colonies doubled every twenty years. He condemned the English poor laws, and denounced any imitation of them by the colonies. In *Reflections on the Augmentation of Wages* he discriminated between cheap and low-priced labour, showing that high wages may be cheap labour.

Franklin was influenced by the writings of the French economists, which had considerable circulation in America, and in 1769 he followed the physiocratic doctrine of the unproductiveness of manufactures in *Positions to be Examined Concerning National Wealth*. His economic writings are conveniently collected in *Works of Benjamin Franklin* (Spark's ed.), Boston, 1836,

vol. ii. pp. 253-521, annotated by Willard Phillips; or may be found in the several volumes of the last and best edition (edited by J. Bigelow, New York, 1887, 10 vols.), by consulting the index. A bibliography of his numerous writings is found in *Life of Benjamin Franklin*, by John Bigelow, Philadelphia, 1874, vol. iii. pp. 491-512.

D. R. D.

FRANKPLEDGE. There being no police system among the Anglo-Saxons, its place was supplied by the *frithborh*, or mutual responsibility. Every freeman had to have a *borh*, who was responsible for producing him if he was charged of crime, and whose property could be seized if the accused failed to appear. Under the Normans this practice grew into the more highly-organised frankpledge. The whole community was divided into bodies of ten men, who were responsible for bringing to justice any of their members. The visits of the sheriff to the hundred courts to see that this system was kept up were called the view of frankpledge.

R. L.

FRAUD. English judges have always been loth to bind themselves down to any hard and fast definition of fraud, lest the restless ingenuity of the dishonest should evade the wholesome restraint of the law. Fraud may be described roughly as any deceit practised by one person on another to the prejudice or intended prejudice of the latter. If the guilty party relies on a fraudulent transaction (for instance, a fictitious sale to defraud an execution-creditor), the transaction may be set aside though no one has been actually prejudiced, but if one person sets up fraud as a ground of relief against another, he must show that he was in fact deceived and prejudiced by the fraud. It consists essentially in a false representation, or its equivalent by active concealment as opposed to a mere non-disclosure of material facts. The false representation may be made by means of conduct as well as by words, written or spoken; and it is not necessary that any particular person should be contemplated as the victim of the fraud. For instance, if two persons agree to draw and accept fictitious bills of exchange, in order to defraud the acceptors' creditors in bankruptcy, whoever they may be, the transaction is a fraud.

It was formerly thought that there was a distinction between "legal" and "moral" fraud, and that a man might be guilty of legal fraud if he made a false representation, to the detriment of some other person, without reasonable grounds for believing his representation to be true. But it is now finally settled that there is no *tertium quid* between good faith on the one hand, and bad faith or fraud on the other. It is not essential that the person making the false representation should know it to be false. A reckless false statement, made without regard to its truth or falsehood, may

amount to a fraud, for if a man asserts that he knows a thing to be true without knowing whether it is true or false, he is simply telling a lie. It is of course necessary that the false statement should be believed and acted upon by the person to whose detriment it operates. A lie, known to be such, does not come within the legal scope of fraud. It is at most an attempt to defraud. It follows from what has been already said that there may be various untrue representations which do not constitute frauds. The contract of sale may be taken as affording a good illustration. First, a representation made by the seller may form part of the contract, and amount to a warranty. In that case he is held to the truth of it whether he believed it to be true or not. Secondly, the representation may be a mere expression of opinion or commendation by the seller of his wares. In that case it is inoperative, for the rule is, *simplex commendatio non obligat*. Thirdly, the representation may constitute part of the description of the thing sold. In that case the seller's knowledge is immaterial, for if the representation be not true, the parties were never at one as to the subject matter of the contract. Fourthly, the representation may be false and fraudulent. In that case, even if the representation only goes to part of the consideration, the whole transaction may be vitiated thereby.

A contract induced by fraud is voidable, not void. It is in the option of the party defrauded, when he finds out the fraud, either to affirm the transaction, holding the guilty party to the truth of his statements, and claiming compensation if necessary, or to set up the fraud. If the contract has not been performed, the party guilty of the fraud cannot enforce it. If the contract has been performed, wholly or in part, the party defrauded may still repudiate the contract, unless it has become impossible to restore the parties to the position in which they would have been if the contract had not been made, or unless the rights of innocent third parties have intervened. If restitution be impossible, the party defrauded is driven to his remedy by action for damages, in respect of the injury he has suffered. Formerly this action was known as the "action of deceit," but it is now commonly described as an action for false and fraudulent representations.

Various specific frauds are punished by the criminal law, and it is to be noted that any combination of two or more persons to defraud the public, or a third person, constitutes an indictable conspiracy.

[Anson on *Contracts*, 5th ed. (1888).—Pollock on *Contracts*, 5th ed. (1889).—Stephen's *Digest of the Criminal Law*, 3rd ed. (1883).] M. D. C.

FRAUDS, THE STATUTE OF. This statute, 29 Charles II. c. 3, is entitled in the statutes at large "an act for prevention of frauds and perjuries." It was passed in the year 1678, as

explained in the preamble, "for the prevention of many fraudulent practices, which are commonly endeavoured to be upheld by perjury and subornation of perjury." It guards against these evils by providing for certain important transactions an obligatory form consisting of a writing and signature. But a brief analysis is necessary for the proper understanding of the statute.

The statute consists of twenty-five short sections roughly drafted and arranged in a very loose order. It deals with the following subjects:—(1) contracts; (2) leases; (3) creations and assignments of trusts; (4) wills; (5) judgments.

1. *Contracts*.—The sections relating to contracts are: § 4 requires a memorandum in writing signed by the party who is to be made liable, or by the agent of such party, for any contract of the five following kinds:—

(a) Promise by an executor or administrator to make good out of his own estate damages recoverable out of the estate of the deceased.

(b) Promise amounting to guarantee or undertaking to go surety.

(c) Promise made upon consideration of marriage (explained not to mean a promise of marriage).

(d) Agreement for sale of real property or of any interest therein.

(e) Agreement not to be performed within the space of a year from the making thereof.

§ 17 requires for a contract for the sale of goods for the price of £10 or upwards, either

(a) part acceptance of goods sold, or

(b) payment of earnest or part payment of price, or

(c) a memorandum in writing made and signed by *both* parties to the contract or by their agents.

Lord Justice Brett in the case of *Britain v. Rossiter*, and Lord Blackburn in the case of *Maddison v. Alderson*, have laid down that the effect of failure to comply with the provisions of either of these sections, in a case to which they are applicable, is not to prevent the formation of a contract, but to render proof of the contract inadmissible. But these sections cannot be correctly understood without reference to text-books on contract, and to the reported cases, amounting to many hundreds, which elucidate them. Their utility has been the subject of the most contradictory opinions by experts. Their intent was to ensure proper evidence of important contracts. The objections to these sections are briefly as follows:—

(a) "Restrictions on contracts so wide and general as are prescribed by this act are peculiar to the English law and the American, which has derived them from the English" (Leake, *Papers of Juridical Society*, vol. i. No. 14).

(b) As the existence of these restrictions is

not generally known to men of business, the statute has introduced insecurity into business transactions. Thus a verbal contract for the sale of goods over the value of £10, where there has not been part payment of the price or part acceptance of the goods, cannot be enforced because of the statute, although of frequent occurrence in business. Although it has hindered the perpetration of fraud through a feigned contract established by perjury, it has enabled dishonest men to elude agreements which they were morally bound to keep.

(c) The evils against which these sections were originally directed have been much lessened since parties were allowed to be witnesses in their own causes. (See 14 & 15 Vict. c. 99, § 2, etc.)

(d) These sections being roughly drafted have "introduced great confusion and uncertainty into the law of contract," so that "it is universally admitted that no enactment of any legislature ever became the subject of so much litigation" (Leake).

The 17th section appears to have fallen practically into disuse. Mr. Justice Stephen says that he has hardly ever been called upon to decide a case under it, and is informed that in some large towns mercantile men repudiate it in practice.

2. *Leases*.—The sections relating to leases are §§ 1, 2, and 3. They require (a) that every lease shall be in writing signed by the parties or their agents, except leases not exceeding the term of three years, and in which the rent reserved to the landlord amounts to at least two-thirds of the full improved value of the property demised. A lease which fails to comply with this requirement creates only a tenancy at will.

(b) That every assignment, grant, or surrender of a leasehold interest shall be in writing signed by the parties or their agents.

In cases where the statute of frauds requires a writing for the creation or assignment of a leasehold interest, the Act 8 & 9 Vict. c. 106 requires a deed. But a lease invalid for non-compliance with these statutes may yet be valid as an agreement to grant a lease. Such agreements come under the provision of § 4 respecting agreements for the sale of interests in land.

(3) *Creations and Assignments of Trusts*.—The sections relating to trusts are—

§ 7 requires that every creation of a trust in real estate shall be proved by some writing signed by the party creating the trust or by his last will in writing.

§ 8 excepts from the operation of the statute trusts arising not from the act of any party, but from an implication of law in case of certain transactions.

§ 9 requires that every assignment of a trust, not in real estate only, shall be in writing

signed by the party assigning, or by his last will in writing.

§§ 10 and 11 enact that real estate held upon trust for any person shall be regarded as forming part of that person's assets both in his own hands and in those of his heir.

These sections continue in force, but have not occasioned much criticism.

4. *Wills*.—The sections relating to wills are no longer in force. They provided as follows:—

§ 5 required every will of real estate to be in writing signed by the testator or by some other person in his presence, and by his express direction, and attested and subscribed by three or four credible witnesses.

§ 6 provided that no will of real estate should be revoked otherwise than by (a) a subsequent will or codicil or some other writing executed as above, or by (b) burning, tearing, or obliterating by the testator, or in his presence by his direction.

§§ 19, 20, 21 imposed restrictions on the validity of nuncupative wills (wills made by word of mouth).

§ 22 rendered null and void the alteration, by word of mouth only, of a written will of personal property.

§ 23 made an exception for the nuncupative will of a soldier on service or sailor at sea.

§§ 24 and 25 do not call for notice here.

The above were the first enactments which imposed an obligatory form upon wills. The objections to such a requirement made in the case of contracts certainly do not apply in the case of wills. But this part of the statute of frauds has been wholly superseded by the Wills Act, 1 Vict. c. 26, which requires every will other than that of a soldier on service or a sailor at sea to be in writing signed by the testator and attested by two witnesses, and requires for the revocation of a will either a writing executed with these forms or the destroying of the will by the testator or in his presence and by his direction.

5. *Judgments*.—The sections relating to judgments—

§§ 13, 14, 15 provide that a judgment as against purchasers, *bona fide*, of real estate, liable under the judgment, shall take effect only from the time when the judgment is signed. Formerly judgments had taken effect as against such purchasers from the first day of the term wherein they were entered, or some other time prior to the one thus fixed. Now no judgment affects any land until such land shall have been actually delivered in execution in pursuance of the judgment, 27 & 28 Vict. c. 112.

§ 16 provides that a writ of execution against goods shall take effect only from the time when the writ is delivered to the sheriff for execution. Formerly such writs took effect against such purchasers from the first day of the term in

which they were issued. Now they do not take effect until the goods have been actually seized, 19 & 20 Vict. c. 97.

[For further information respecting the statute of frauds, consult text of statute and the following authorities:—Pollock, *Principles of Contract*.—Leake, *Digest of the Law of Contract*.—Williams on *Personal Property*; Williams on *Real Property*, and the cases referred to in these works. For general criticism of the statute consult No. 14 in the first volume of *Papers of the Juridical Society* (by Mr. Leake), and an article on "Section Seventeen of the Statute of Frauds," contributed by Mr. Justice Stephen and Sir Frederick Pollock to the *Law Quarterly Review*, January 1885.] F. C. M.

FRAUDULENT CONVEYANCE. These words are generally used with reference to conveyances pronounced to be void by the statutes 13 Elizabeth c. 5, and 27 Elizabeth c. 4. The first-named act avoids, as against creditors, all conveyances of landed estates and goods for the purpose of "delaying, hindering, or defrauding" such creditors, unless made on valuable consideration to any person not having any notice of such fraud. As the Bankruptcy Act 1883, subjects all voluntary settlements within ten years of a bankruptcy to the possibility of being declared void, it is seldom necessary to have recourse to the act of Elizabeth, but this may be necessary in cases where property has been given away by an insolvent debtor without being settled, or when the voluntary conveyance was more than ten years old at the date of the bankruptcy. The act of the 27th year of Elizabeth is applicable to *real* property only, and was intended to meet the case of a vendor who, previously to conveying land to a purchaser for value, had fraudulently conveyed it to another person, who by virtue of his priority had acquired the whole property; but judicial interpretation has extended its scope, and until 1893 all voluntary conveyances of land were void as between the original donee and a subsequent purchaser for value. The Voluntary Conveyances Act of 1893 has repealed this extension of the act of Elizabeth, and the operation of the act will in future be confined to such voluntary conveyances as are fraudulent in the real sense of the word. E. S.

FRAUDULENT PREFERENCE (IN BANKRUPTCY). The main object of the bankruptcy laws is to secure the equal distribution of the debtor's assets amongst his various creditors. From the time when the trustee's title accrues, the debtor is no longer free to select the order in which he will pay his debts. Under § 43 of the Bankruptcy Act 1883, the title of the trustee relates back to the earliest act of bankruptcy within three months of the petition, and this provision is supplemented by § 48, which enacts that "every conveyance or transfer of property or charge thereon made, every obligation incurred, every payment made,

and every judicial proceeding taken or suffered by any person unable to pay his debts as they become due from his own money, in favour of any creditor, or in trust for any creditor, *with a view of giving such creditor a preference over the other creditors*" shall, if the debtor be adjudged bankrupt on a petition presented within three months of the date of the transaction in question, be deemed fraudulent and void as against the trustee. Under the act of 1869 the transaction was protected if the creditor acted in good faith and without notice of any act of bankruptcy. The present act disallows the exception. The only question for consideration is the motive of the debtor in making the transfer or payment.

Fraudulent preference in bankruptcy must be distinguished from fraudulent conveyance under the statute 13 Elizabeth, c. 5. The act of Elizabeth operates whether there be a bankruptcy or not,—it contains no provision as to time, and its general scope is somewhat different. It strikes at collusive transactions by which creditors may be defeated or delayed, but does not prohibit the honest preference of one creditor over another. M. D. C.

FREE BANKING is the term applied in the United States to a system under which (1) banking powers are granted to all applicants under certain prescribed conditions, and (2) bank-notes issued under such authority are protected by a deposit of security held by the government which establishes the system. The earlier banks in the United States, whether established by congress or by the state legislatures, were organised under special charters. Various expedients were resorted to for the prevention of unsound issues, with various degrees of success, but without arriving at any generally acceptable method. The suspension of specie payments in May 1837, and the extraordinary confusion of the paper currency which ensued, finally brought the general discontent to a climax in New York, and the legislature of that state, in June 1838, passed an act for the free organisation of banks issuing a secured currency. Under this act, as amended and revised, any group of persons proposing to form a banking association, and contributing a capital in no case less than \$25,000, say £5000, can be incorporated with full banking powers, subject to uniform regulations as to the conduct of their business, its supervision by the state, and their corporate liabilities and duties. Individual banks and firms, who use the name "bank," are also required to conform to the system, although they may remain unincorporated. The right of issue is given to any association or individual coming under the system. The notes are prepared and registered by a public officer, are delivered to the issuing bank only after the deposit of security of a prescribed kind and amount, and must be signed

by the officers of the bank before issue. Banks organised upon such a system are called free banks.

Free banking does not imply, then, an unrestricted management of the business, or complete liberty in the issue of notes. Such a system is called free because the right to organise, upon compliance with fixed conditions, is extended to all, free from any requirement of special legislation. It is not essential that there should be any engagement by the state to make the notes good, if the security, of which the state is trustee, proves insufficient. Neither does the deposit of security for the ultimate payment of the notes answer the question as to proper provision for daily redemption. As the provision for secured notes gave promise of insuring the ultimate solvency of bank notes, it settled the one banking question as to which the public were most sensitive, and enabled the legislature to renounce the task of deciding upon applications for special charters. The system adopted by New York was copied by many other states before the civil war, but in some cases with relaxations which impaired its safety. In 1861 the New York free banks, having on deposit stocks of the United States and other solid securities, met the strain of war with success. In several states, where the law was less rigid, many free banks went down, and their notes, secured in some cases chiefly by bonds of seceded states and others in low credit, caused heavy losses to the holders. Two years later congress adopted the free banking system on a great scale, by a law providing for national banks, to be organised on application under a general act, and to issue notes with United States bonds as the only admissible security. In 1865 congress laid a tax of ten per cent on all bank notes other than national, thus excluding from the field all issues authorised by the states. Several of the states, however, still retain their laws as to circulation, although these have been entirely dormant since 1866. Free banking under the national system was for some years seriously limited, by the provision that the aggregate of notes issued by all the national banks should not exceed \$300,000,000, afterwards \$354,000,000 (say £60,000,000, and £70,800,000) although the organisation of banks was still free to all. The act of 1875, for resuming specie payments, removed the limit of aggregate circulation, and thus completely established free banking under the national government. The rapid rise in price of United States bonds, and the low return yielded by an investment in them, have since put a new check upon the system; and if the use of bank-notes is to continue, the alternative may soon be presented, of either finding for deposit by national banks some other security than United States bonds, or removing the prohibitory tax upon issues authorised by the states. In the

latter case free banking would be likely to be adopted by the states more widely than before, and with provisions exhibiting great variety of detail, unless some arrangement should be devised for the regulation of local issues by national authority upon a common plan.

[*Report of the Comptroller of the Currency* (United States), 1876.—*Public Statutes of Massachusetts*, 1880.—*Revised Statutes of New York*, 1889.—C. F. Dunbar, *Chapters on the Theory and History of Banking*; and *Laws of the United States relating to Currency, Finance, and Banking from 1789 to 1891*.—Andrews, *Institutes of Economics*, 1889, pt. iii.] C. F. D.

FREE BENCH. A widow's dower out of lands held by customary tenure for customary estates of inheritance. It is generally one-third for life, but varies from a portion of the profits to the whole inheritance. The right to free bench does not arise until the death of the husband, and therefore it only affects land of which he was donor at the time of his death (Challis, on *Real Property*, London, 1885).

J. E. C. M.

FREE COINAGE. In its fullest sense a right enjoyed by all persons to bring gold or silver bullion, or both, to a mint and to receive it back in the form of coin, no deduction being made to defray the expenses of manufacture, alloy metal, etc. The conversion at a mint of bullion belonging to a private holder into coin at a low fixed charge, as in Austria, may however be considered *free* when compared with such a system as that in force in this country in regard to the silver currency. For in this latter case the government purchases bullion at the market price, always issuing it at a circulating value of 5s. 6d. per troy ounce of standard metal.

In this country until towards the end of the 17th century, any person was permitted to bring bullion, both gold and silver, to the mint and receive it back in the form of coin, less a certain deduction which was paid to the king as a SEIGNORAGE (*q. v.*), or was employed to defray the expenses of the mint, see BRASSAGE. In 1666 perfect freedom of coinage for both metals was established. An "Act for encouraging of Coynage" (18 Chas. II. c. v.) was passed whereby it was enacted that "Whatever person or persons, Native or Foreigner, Alien or Stranger, shall from and after the twentieth day of December, one thousand six hundred sixty and six, bring any Foreign Coyn, Plate or Bullion of Gold or Silver, in Mass, Molten or Allayed, or any sort of Manufacture of Gold or Silver into His Majesties Mint or Mints within the Kingdom of England, to be there melted down and Coyned into the current Coyns of this Kingdom, shall have the same there Assayed, Melted down and Coyned with all convenient speed, without any defalcation, diminution, or charge for the Assaying

Coynage or waste in Coynage." This important change was proposed in consequence of the great scarcity of currency owing to the common practice of melting and exporting coins, and the act was to remain in force for a period of seven years only. It was, however, renewed at seven-year intervals without intermission until 1768, and then made perpetual. The continuing acts make frequent reference to the desirability of renewing the grant to the king of rates, duties, and impositions "upon the importation of Wines, Vinegar, Cyder, Beer, Brandy, and Strong Waters," which were set aside for the maintenance of the mints, lest "this Kingdom be deprived for the future of so great a good as it hath for so many years last past enjoyed." It is clear, from the currency literature of the period, especially that published towards the end of the 17th century, that this latter opinion was far from being universally held. Sir Dudley NORTH, for example, writes in 1691, in reference to the melting of newly-coined money by private persons, "Thus the Nation hath been abused and made to pay for the twisting of Straw for Asses to eat," and the imposition of a charge sufficient to defray the expenses of the mint has been advocated by Adam SMITH, J. S. MILL, RICARDO, and many other economists of note.

The free coinage of silver was suspended in 1798, in consequence of the low price of bullion, and finally abolished in 1816, when our present currency was introduced, although the right was then reserved to the king to authorise the receipt of silver for coinage at the mint, subject to a deduction on account of seignorage of 4s. from every pound weight of sixty-six shillings. This right has, however, never been exercised.

When in 1869 the chancellor of the exchequer, Mr. Lowe, afterwards Lord Sherbrooke, proposed to meet the expenses of coinage by deducting one grain of gold from the weight of each sovereign issued, the subject of free coinage was exhaustively discussed in parliament and the press, and it is curious to note that, whereas two centuries previously free coinage had been adopted "for the encouragement of the bringing of Gold and Silver into the Realm," the main argument urged against Mr. Lowe's proposal was that it would have a disastrous effect on British commerce by interfering with the free use of the sovereign in commercial transactions abroad.

In no other country is the coinage of gold as absolutely free as it is in England, but in the United States all charges have been abolished since 1875, except that for the alloying metal. In France, and the other States forming the "Latin" Union, the charge imposed amounts to 6·70 fr. per kilog. of gold of standard 900 (value 3,100 fr.) or 0·216 per cent; in Germany the charge is 6 marks for coining 1 kilog. of

gold, that is 0.215 per cent, or nearly the same as in France.

Free coinage of silver, even in the more restricted sense, has now been generally abolished. Up to June, 1893, silver was coined for private persons at the Indian mints at a charge of 2.1 per cent, but this liberty was then withdrawn. No European State undertakes the coinage of silver except on government account, and the same is the case in the United States, where the law requiring the purchase by the government of a definite quantity of the metal has now been repealed. In Mexico the export of uncoined silver bullion is prohibited; all silver intended for export must, therefore, pass through one of the mints, where a coinage charge amounting to 4½ per cent is imposed. Most of the Central and South American states impose a charge for the coinage of silver, which amounts, in Peru, to as much as 9.86 per cent.

[*Report of the Royal Commission on International Coinage*, 1868, p. 320.—*The Times* and other newspapers, Aug. to Oct. 1869.—S. Dana Horton, *The Silver Pound*, 1887.—Lord Liverpool's *Letter to the King on the Coins of the Realm*, 1805.—*The Gold Coinage Controversy*, 1869 (privately printed by the Bank of England).—"Seigneurage and Mint Charges," by J. B. Martin, *Journ. Inst. Bankers*, vol. v. (1884), p. 171.] E. R.

The Bank of England is bound by law to purchase at the rate of £3:17:9 an ounce any gold bullion of the legal standard brought to it by the public for sale. Private persons may likewise bring bullion to the mint, and receive back the full amount (at £3:17:10½ an ounce) converted into coin, free of any charge for loss or manufacture; but as there may be considerable delay, the public prefer to sell their bullion to the bank and receive their value at once (see article on Mint, *Ency. Brit.*, 9th ed., vol. xvi. p. 485). The payment to the bank thus does not represent any charge on the coinage, but only remuneration for trouble and loss of time.

FREEDOM IN THE MIDDLE AGES. Though there was not an absolutely fixed line in the middle ages between those who were possessed of freedom, and those who were not, yet the division between these two classes was for many purposes very distinctly marked. The following article on the **FREEDOM OF THE CITY OF LONDON** will serve as an example of the rights and privileges conferred by obtaining freedom in a city. For other branches of the subject see articles on **ENFRANCHISEMENT**, **FREEMAN**, **FREE TOWNS**, **SERF**, **SERFDOM**, **SERVITUDE**, and **VILLEIN**.

FREEDOM OF THE CITY OF LONDON. The right to share in the duties and privileges of citizenship in London seems in the earliest times to have been extended to all holders of tenements, who were in **SCOT AND LOT** (*q.v.*), and who were therefore called upon to contribute

to common civic burdens and to fill leet offices. Even to-day "inhabitaney as a householder is still termed the common law qualification of burghers, and the scot and lot householder, when admitted a freeman, remains the only true and efficient citizen for all civic purposes" (Norton, *Commentaries*, pp. 100, 101), although others have in later times been admitted with certain qualifications to the enjoyment of some of his rights. After the grant of a corporation, *temp.* Richard I. (1189-1199), *enrolment* into the civic freedom was required of all freemen. Norton suggests that this step was taken "very soon after, if not immediately upon, the foundation of the corporation itself," and that enrolment took place in the hustings court, urging that such admissions are referred to as common in the reigns of Edward I. (1272-1307) and Edward II. (1307-1327). It would seem, however, that the practice of enrolment can be definitely traced to the year 1275, when it was provided that the names of apprentices and of all who wished to buy the freedom should be inscribed "in papirio camere gildaule" (Brit. Mus. *Cott. MSS.*, *Otho*, B iii. transcribed in *Add. MSS.*, 5444, f. 90; Brandon, *Inquiry into the Freedom of the City of London*, p. 15). In that same year the methods of acquiring the freedom would seem to correspond to those in vogue to-day. It is stated in the MS. above quoted that there are three ways, (1) by birth; (2) by apprenticeship, and that for a term of not less than seven years—an interesting and possibly the earliest notice of this custom of London; (3) by taking it up "before the mayor and other aldermen in the chamber of the city." In Edward II.'s reign a mercantile qualification becomes an important feature. By a charter of 12 Edw. II. inhabitants and others, being of any certain mystery or trade, might be admitted into the freedom only "by surety of six honest and sufficient men of the mystery or trade that he shall be of, who is so to be admitted," and that in the hustings courts. If, however, they were strangers and not of some certain mystery, they could not be admitted into the freedom without the assent of the commonalty; "saving always, that concerning apprentices the ancient manner and form of the said city be observed" (Cp. Birch, *Hist. Charters*, p. 47). Somewhat later it was ordained that no one should be admitted into the freedom of the city, unless the wardens of a company gave their consent and certified that he was a member of their body (Brandon, p. 19, quoting *Liber Dunthorne*, f. 101 b). This restriction remained in force until by a resolution of common council, 17th March 1835, it was decided to confer freedom on certain terms through the city chamberlain irrespective of the great trading companies (Minutes of Common Council, 17th March 1835).

(1) The most ordinary form of acquiring

freedom was by serving an apprenticeship to a freeman, free both of a company and of the city, until an act of common council (9th March 1836) sanctioned the binding of apprentices to freemen of the City who had not taken up the freedom of any company (Minutes). The term of service in London was for seven years until 1889, when it was reduced to four years (Act of Common Council, 14th March 1889). While, however, apprenticeship for a varying term of years (until 5 Eliz. c. 4, fixed the minimum at seven)—came in most English towns to be the one method by which citizenship was acquired, in London, although very usual, it never became the sole qualification.

(2) Freedom by patrimony has, as shown above, conferred civic freedom from early times; all children male and female of a freeman born after his admission can claim their freedom at the age of twenty-one years.

(3) Freedom by redemption or purchase. This is possible (a) where the apprenticeship indentures have, for some good reason, been only imperfectly executed; (b) where persons, not aliens, are admitted by grace and favour; (c) where the presentment is by the chamberlain, or some person entitled by grant to confer freedom (Reports, 1837, xxv. p. 61). The commission on municipal corporations issued a report in 1835 which excluded London, a subject which was dealt with in a special report issued in 1837. In this the important resolution and the act of common council (17th March 1835; 9th March 1836) are left out of account, and an additional case of freedom by redemption is quoted as possible, though not very common; (d) this was where an individual, entitled to admission through one company, desired to be admitted through another. The majority of cases by redemption are simple purchases, the buyers being presented to the Court of Aldermen and admitted upon the payment of certain fees (Pulling, *Customs*, p. 64), though the consent of the Court of Common Council is required in the case of aliens. And to-day, practically any one can buy the freedom, although such a purchase does not confer *all* the privileges of citizenship (*City of London Directory*, 1893).

Females may obtain the freedom by patrimony or by apprenticeship, taking an oath, similar to that of a freeman, as a "free sister." As such they may take male apprentices and enjoy various privileges, though these are suspended by marriage. Widows of freemen are deemed *free by courtesy* during the period of widowhood (Reports, 1837, xxv. 61, 63).

The fines payable on admission seem to have been very arbitrary, and to have varied considerably at different times, the exact sum being fixed at the discretion of the aldermen and chamberlain (Brandon, p. 20).

From early times exceptional privileges have been granted by the crown to the citizens of

London in a series of charters, while ancient customs have been confirmed or amended by city ordinances (Charter, 15 Edw. III.; Norton, p. 364); in case of necessity these are recorded "by the mouth of the recorder" before the king's justices without the intervention of a jury (Charter, 2 Edw. IV.; Birch, p. 76). For a detailed account of the privileges, careful examination of many documents is essential, and it may be sufficient to indicate such as are noticed by the chief authorities on the subject, and which have dealt with the trade and government of the city. The right to engage in retail trade could be enjoyed by all freemen whether resident or not, and by them alone, until an act of common council in 1856 admitted all, whether free of the city or not, to retail trade. On the question of wholesale trade there has been much difference of opinion. It would seem that though strangers, *i.e.* non-freemen, might engage in wholesale trade, they might deal only with freemen and not with other strangers; the commissioners of 1837 stated however that, though not enforced, wholesale trading should, strictly speaking, be limited to freemen. Freemen have always been held exempt from all tolls and customs held by the crown throughout the country when Henry I.'s charter was granted, non-resident freemen being merely free from city tolls and port dues. They were free from impressment as soldiers or sailors (Charter, 15 Edw. II.), nor could they be forced to plead without the city. The right to share in the government of the city, directly or indirectly, has also from early times been restricted to freemen; they alone can enjoy appointments in the gift of the common council, though this rule is suspended in the case of barristers (Reports, 1837, xxv. 38); and the highest civic officials, *e.g.* lord mayor, sheriffs, etc., even to-day must be liverymen of some company. For centuries the freemen paying scot and bearing lot elected the members of the common council, the aldermen, and ward officers, until, indeed, by 30 Vict. c. 1, the right was extended to occupiers and lodgers who were not freemen of the corporation (Norton, pp. 244, 251). By a civic ordinance of 49 Edw. III., the trading companies were empowered to nominate a certain number of freemen to vote in the elections of lord mayor, sheriffs, corporation officials, and parliamentary representatives, and from these the mayor selected the voters (Norton, p. 245). But by ordinance of 15 Edw. IV. the nomination was left entirely in the hands of the companies, the members of which, then and for long afterwards, were all traders and therefore almost necessarily householders. They were directed to send some of their more important members to take part in elections, attired in a distinctive dress or livery. And from this dates the appearance of the livery men as a superior class within the companies,

to whom was entrusted the elective franchise in the common hall; this they exercised until 11 Geo. II. c. 18 extended it to liverymen, free of the city, but not necessarily residents (Norton, 107). And this remains to-day the qualification of electors to corporate offices in common hall (*ib.* 251); the number of liverymen thus qualified was 7603 in 1893 (*City of London Directory*, 1898). The various reform bills of this century have extended the parliamentary franchise to others than freemen, although a liveryman and freeman of London by birth or servitude, and residing within twenty-five miles, can still claim a vote.

The right to benefit by certain charities, and of appointment to certain civic offices, and to the election of certain municipal and parliamentary representatives, are perhaps the most obvious and the most important of those which may be enjoyed by freemen and liverymen to-day, although the ancient "custom" still holds good where it has not been expressly given up.

[Norton, G., *Commentaries, etc., on London* (1869).—Pulling, A., *Laws, Customs, etc., of London* (1854).—Brandon, W., *Enquiry into the Freedom of City of London* (1850).—Extracts (*Brit. Mus.*, 6425, cc. 19).—Austin, E., *Laws Relating to Apprentices* (1890).—Birch, W. de Gray, *Historical Documents and Charters, etc., of London* (1887).—Bohun, W., *Privilegia Londini* (1702).—Welch, C., *Leaves from History of Gilds, etc., in Newbery House Magazine* (1892, 1893).—Merewether, H. A., and Stephens, A. J., *History of Boroughs and Municipal Corporations.—Second Report of Commissioners appointed to enquire into Municipal Corporations in England and Wales* (1837, xxv.). Also *Reports*, 1854, vi.—*Acts and Minutes of Court of Common Council.—Liber Albus.—City of London Directory* (1893).] E. A. M.

FREE ENTERPRISE. See LAISSEZ-FAIRE.

FREEHOLD, HISTORICAL. The term "freehold" we owe to the mediæval law of real property. It is used to describe such tenures as were considered worthy of a freeman. According to the theory of feudalism the political and civil rights of the individual depended on his relation to the land. In a feudal society developed according to strict logic the freeholder alone would have been a freeman, and only the freeman would have been a freeholder. But in no European country, least of all in England, was the feudal principle worked out to all its logical consequences. Only the freeman could be a freeholder. But even in the feudal period freemen frequently held land by tenures other than freehold, by tenures technically regarded as base or servile.

The term "freehold" appears to have come into use about the end of the eleventh or the beginning of the twelfth century. "Some time before the reign of Henry II., but apparently not so early as Domesday, the expression *liberum tenementum* was introduced to designate land held by a freeman by a free tenure" (Kenelm

Digby, *History of the Law of Real Property*, p. 49). But the thing had been developed long before the name had been found for it.

Some characteristics are common to all freehold tenures. (1) The indefinite duration of the freeholder's interest in his land. An estate to a man for his life (a life estate), an estate to a man and his descendants (estate tail), an estate to a man and his heirs (fee simple estate) are all freehold estates. They are likely to differ much in point of duration. But they are all alike in this that the moment of determination is uncertain. A lease of land for 999 years does not give a freehold estate to the lessee. It is not likely that this consideration would have led any free man to prefer an estate for life to an estate for 999 years. But when the theory of freehold tenures grew up, long leases were unknown and leases of whatever duration were uncommon. (2) The obligation of fealty. The freehold tenant did homage to the lord for his land and took an oath of fealty. (3) The liability to forfeiture and escheat. Upon the tenant's failure to perform any of the conditions on which he received his land, he incurred the penalty of forfeiture and his land might be resumed by the lord. Upon the failure of the tenant's line either for want of heirs or through corruption of blood consequent upon his conviction for felony the land reverted to the lord in virtue of his right of escheat (see FORFEITURE). (4) Suit of court. The tenant was bound to appear as an assessor in the lord's feudal court of justice, and for some purposes to submit himself to the jurisdiction of that court.

In general the services which the various classes of freehold tenants had to render to their lords were only such as appeared consistent with the dignity of a free man. But they differed so much in character that they must be considered separately with reference to each species of freehold tenure.

I. Tenure by chivalry or by knight service. On this tenure land was held by the military tenants of the crown and also by the military tenants of earls and barons. Its distinguishing characteristic was the obligation to render military service, if called upon, for forty days in each year, with a number of fully-armed horsemen proportioned to the size of the estate. From the time of Henry II. onwards this obligation was frequently commuted for a money payment known as scutage (shield-money). But this tenure involved other burthensome obligations. The principal were as follows:—

(a) The liability to aids or payments made to the lord upon certain important occasions, the knighting of his eldest son, the marriage of his eldest daughter, or the ransoming of his person from captivity. (b) The liability to reliefs or payments made to the lord by the heirs of deceased tenants upon coming into

their estates. (c) Wardship or the right of the lord to administer the estate during the minority of his tenant without having to render any account when the tenant came of age. (d) Marriage, or the right of the lord to choose a husband for a female tenant who was his ward, and to receive a payment from the favoured suitor. Those burthens were regulated by Magna Charta in the year 1215. But they remained so onerous that under James I. it was proposed to commute them for a permanent revenue to be settled on the crown. Under Charles II. they were so commuted by the act for the abolition of military tenures (12 Car. ii. c. 24).

II. Tenure by grand serjeantry. On this tenure land was held direct from the crown for service rendered in person to the king, such as carrying the royal banner when he went to war. This tenure still exists, but is extremely rare and of no consequence save as a legal curiosity.

III. Tenure by free or common socage. The etymology of the term "socage" is doubtful. It has been derived from an English word "soc," a privilege, as in the phrase "sac and soc," and from a French word "soc," meaning a plough-share. "Sochemanni" form one class of the population as enumerated in Domesday Book, and are probably the representatives of the class of free landed proprietors other than thegns or churchmen previous to the Norman Conquest. Persons holding land by socage tenure were free from some of the most oppressive burthens incidental to military tenure. They owed no military service for their land although they were liable, as were all freemen, to serve in the national militia when necessary. They were accordingly exempt from scutage, the money payment in lieu of military service. They were exempt from the annoyances incidental to wardship and marriage. For the lawful guardian of a minor holding land by this tenure was not his lord, but the nearest of kin not capable of inheriting the land. And such a guardian was not allowed to make any profit by the marriage of his ward. The tenant in socage was obliged to make certain money payments, aids, reliefs, rent, etc., or to render his lord certain agricultural services strictly defined beforehand. On account of the advantageous character of socage tenure it was provided by the act 12 Car. ii. c. 24, that all land formerly held on military tenure should thenceforwards be held on socage tenure. Thus by far the greater part of the land of England is now held in socage. In the course of time the burthens of socage tenure have become almost nominal. For by the statute *Quia Emptores* of 1290 (18 Ed. I. c. 1) sub-infeudation was forbidden. Thenceforwards any person taking a transfer of freehold lands stepped into the place of his predecessor and became liable only to those obligations

to which his predecessor had been liable. Thus the freeholder of to-day has to make only such feudal payments for his land as had been settled before the year 1290 and these have become nominal in consequence of the fall in the value of money and the rise in the value of land. As society became more settled the lord lost his motive for exacting the oath of fealty, which has long since become obsolete. The feudal courts having dwindled to mere forms, the obligation to suit and service now means nothing. Corruption of blood and escheat of lands upon the tenant's conviction for felony are no longer enforced by law. The enlarged power of testamentary disposition has made escheat for lack of heirs to the tenant a very rare occurrence. Finally, the rights of the lord having lost all their value have in many cases been allowed to fall into utter desuetude. The record of them has frequently perished. Thus many freeholders cannot be shown to have any lord under the crown, and the freeholder has come to regard himself, and is regarded by others, as full proprietor of his land.

Socage tenure, being a product of customary law, has sometimes assumed peculiar forms. In one form, known as petty serjeantry, the tenant held his land of the king on condition of rendering him every year some object of use in war, such as a pair of gilt spurs. Other forms, known as burgage tenure and gavelkind tenure, are distinguished by peculiar rules of succession, when the tenant dies intestate (see DESCENT OF PROPERTY).

It remains to mention a free tenure of land so distinct from those which have been mentioned as hardly to admit of being classed with them. This is FRANKALMOIGN or free alms (Lat. *libera elemosyna*). On this tenure land was and is held by ecclesiastical corporations. The service rendered for land thus held was spiritual, consisting simply in prayer and performance of the rites of religion. The holders paid no rent in money or in kind. They were not subject to aids or reliefs. They were not subject (being corporations and therefore immortal) to escheat or forfeiture. They were not capable of military service. Thus their tenure approached more nearly than any other tenure recognised by English law to a full ownership.

[For further information see FREEHOLD (Legal) and the articles therein referred to.

Goodeve, *The Law of Real Property*.—Williams, *The Law of Real Property*.—Kenelm Digby, *History of the Law of Real Property*.—Pollock, *Land Laws*.—Hallam, *History of the Middle Ages*.—Stubbs, *Constitutional History of England*.]

F. C. M.

FREEHOLD, LEGAL. A freehold tenure of land meant formerly a tenure which obliged the tenant only to such services as were worthy of a freeman (see FREEHOLD, HISTORI-

CAL). In course of time these services have either wholly disappeared or have become insignificant. A quit-rent of nominal amount is still payable in some cases to the lord of the manor, and when an heir succeeds to the freehold he has to pay a relief amounting to one year's value of this quit-rent. Where a manor is still existent the freeholder is still bound to attend the court baron held by the lord. But the court baron is practically never held. An oath of fealty to the lord, where there is a lord, is still due in theory but in practice is never exacted. In short the freeholder has practically the full enjoyment of his land unencumbered by any real duties towards a lord. He therefore approaches much more nearly than a leaseholder or a copyholder to the character of an absolute owner.

But the interest of a freeholder in his land differs in extent accordingly; as it is (1) an estate for life; (2) an estate in tail; (3) an estate in fee simple. (For the nature and peculiarities of these different estates, see ESTATE.) If a man have an estate in tail or in fee simple, he has an interest in the land which extends beyond his own life. This interest descends to his heirs according to the peculiar rules governing the devolution of real estate (see DESCENT OF PROPERTY). In many cases a family settlement (see ESTATE) provides for the creation of life estates or estates tail in remainder, which come into possession as the preceding life estate or estate tail expires. But the power of thus controlling the devolution of the land is restricted by law (see PERPETUITIES).

Owing to the gradual enfranchisement of copyhold land (see COPYHOLD), an increasing proportion of the land of England is held as freehold, and at no distant date the whole will be so held (see also LEASEHOLD). F. C. M.

FREE LIST is a term arising out of the prevalence of unwieldy tariffs of import duties in foreign countries and many British colonies. It denotes the schedule of commodities exempted from payment of duty on the importation into any given country. C. A. H.

FREEMAN. Modern conceptions of the distinction between freedom and non-freedom can be applied only with caution to ancient and mediæval history. As applied to the middle ages they are particularly misleading; for the most characteristic feature of the social conditions of the time was the existence of the intermediate position now commonly spoken of as SERFDOM (*q.v.*). Thus, under the later Roman empire, the large class of *coloni* were distinctly free by condition, with all the civil rights of other freemen, and even the power of suing their masters; they were nevertheless bound to the soil, and subject to burdensome duties from which they could not escape. A law of the fifth century distinguishes "the bond of colonate," *nexus colonarius*, from "the condition of

slavery," *conditio servitutis*; and yet another, somewhat earlier, remarks that "though the *coloni* are of course free by condition, they must be looked upon as the slaves of the land on which they are born." Moreover the slave proper, during this period, by no means obtained that independence towards his former master, when he received manumission, which was gained by a modern freedman. He remained in close dependence upon him, usually as the cultivator of a holding on very onerous terms.

The question of the condition of the rural population in England in the earlier Saxon centuries is still undecided. But it is generally agreed that the position of the cultivators of the soil for at least two centuries before the Norman Conquest was substantially the same as that of the villeins and cotters after that event. If these cultivators were as a class identical with the *ceorls*, as is almost certain, they were doubtless technically free, though held in strict economic subjection, and bound to labour two or three days every week, and in busy seasons almost every day, for the lord of whom they held their land. Hence the Domesday survey, while it registers only some 12,000 persons (= heads of households) as freemen, *liberi homines*, and 23,000 as SOCMEN (*q.v.*) (persons, in all probability, in much the same position)—the "free men" being almost exclusively in Norfolk and Suffolk; and on the other hand notices 25,000 as slaves, *servi*; gives about 200,000 as falling into the classes of the VILLEIN and COTTIERS (*q.v.*), whose status between that of the LIBER HOMO and that of the SERVUS (*q.v.*) it leaves undetermined.

The introduction of the feudal jurisprudence after the Norman Conquest led to a greater importance being attached to the nature of tenure; and for the next four centuries the questions of tenure and personal condition were almost inextricably confused. The class of "free tenants," LIBERE TENENTES (*q.v.*), which grew so rapidly after the 11th century, was practically coextensive with that of "free men." But as to what exactly constituted free tenure the courts did not maintain a consistent doctrine. A very widely spread idea was that inability to give a daughter in marriage, or to sell an ox or a horse without the lord's consent, was a certain mark of servile tenure. On the other hand, exemption from the more laborious dues known as WEEK-WORK (*q.v.*) was frequently regarded as constituting free tenure; and villeins relieved from these obligations tended to rise to the class of freeholders. It is possible that in their desire to place the whole population in one of the two classes of free and non-free, the lawyers of the 13th and 14th centuries came at last to deny freedom to persons in a position which in Saxon times would have been regarded as free. But this more rigid

application of mutually exclusive terms did not necessarily involve any material degradation of the class in question, and was not inconsistent with a material elevation.

The legal identification of villeinage with non-freedom was probably beneficial to the class of chattel slaves which certainly existed in the 11th century. The servile stigma, attached to so large a part of the nation, ceased to involve any peculiar disabilities even in the case of the descendants of actual slaves, who became merged in the class of customary holders and copyholders. Slavery had long been forgotten when, in 1772, Lord Mansfield declared, in the case of the negro *Sommerset*, that slavery could not exist in England,—“a decision which did more credit to the hearts of the judges than to their knowledge of history.”—The terms “freedom,” and “franchise,” were also applied to the possession of the rights of a burgher, and to membership of the city companies.

[For the Roman colonate see Fustel de Coulanges, *Recherches sur quelques problèmes d'histoire* (1835), espec. pp. 98 seq. The best introduction to the discussion on Saxon ranks will be found in note iii. to ch. viii. in Hallam's *Middle Ages*. For post-Saxon conditions in England the most important treatises, from very different points of view, are F. Seebohm, *English Village Community* (1883), espec. pp. 86 seq., and P. Vinogradoff, *Villainage in England*, 1892 (summing-up pp. 217 seq.), whereon see also the criticism by Seebohm in *Eng. Hist. Rev.*, July 1892; by Ashley in *Econ. Rev.*, April 1893; and by Leadam in *Pol. Sci. Q.*, Dec. 1893. On the disappearance of slavery, cp. Freeman, *Norman Conquest*, v. p. 140.

Reference may also be made to *Sommerset's* case in Broom's *Constitutional Law*, where the historical and juristic aspect of slavery is discussed with much learning.] W. J. A.

FREE TOWNS. In the article on mediæval cities (see *CITY, MEDIÆVAL*), it was pointed out that, though they had many features in common, in whatever part of western, southern, and central Europe they were established, yet their powers and privileges differed greatly according to their surrounding circumstances. In England and France, the growing predominance of the monarchical régime tended inevitably to curtail the rights of civic self-government, and it was only in those countries where the traditions of the old Roman empire were still strong, or the power of the new monarchical principle weak, that *free cities*, in the sense of more or less self-governing communities, were really established. They may be defined as cities possessing independent governments of their own, each virtually forming a state by itself; many were republics. It is, therefore, in Italy, Spain, the Netherlands, Germany, and Switzerland, that we find the historic examples of true civic liberty, though even in these cases the prestige of a feudal aris-

toocracy, or hereditary oligarchy, or again the rise of a loose federation, or the proximity of an imperial suzerainty tended inevitably to modify the primitive features of that liberty. Italy is the historic ground of the free cities of the middle ages. There, owing to the weakness of the imperial sovereignty, whether emanating from Constantinople or Germany, the towns, especially in the northern portion of the peninsula, were able to raise themselves to the proud position of independent states, not only exercising complete control over their internal affairs, but waging war, making peace, and entering into alliances with each other, like the city-states of ancient Greece and Italy. Inland, Milan, Florence, Verona, and other cities contended with each other for empire over the fertile plains of Lombardy; while on the seaboard, Pisa, Genoa, and Venice raised themselves into great sea-powers in the east and west Mediterranean waters; and lesser cities, like Naples and Amalfi, scattered on the Italian coasts, followed their example with greater or less success. The enterprise and energy of all these cities alike was largely due to the fact that the fierce feudal aristocracy, that had sprung from the loins of barbaric invaders, had with its absorption into the civic life instilled the spirit of war into the workshop. The territory originally subjected, after the disruption of the Roman empire, to the count or bishop of these cities, had been reduced by concessions to the rural nobility, but after a while the cities began to reassert their sovereignty. Sometimes they besieged the strongholds of the nobility, sometimes they purchased feudal suzerainties, and finally by the 12th century there could hardly be found a single nobleman, except the marquis of Montferrat, and some noble families like those of Este and Malaspina, who had not given in their submission. The rural nobility, having lost its power outside the cities, strove to recover it inside, and by the erection of strongholds within the cities established a basis of further political and military operations. Hence a fierce belligerency at home and abroad is the chief feature of Italian republicanism; resulting in a striking development of the arts of war alongside those of peace, a development in some towns crowned with the laurels of an art and literature that recalled the palmy days of ancient Athens and Rome. Among the Lombard cities, Milan was most conspicuous for its wealth and wide-reaching power. By its warlike policy, shown in its ruthless conquest of neighbouring towns, like Lodi and Como, it drew on it the resentment of the imperial power in the person of Frederick Barbarossa, who in 1158 reduced the city, and handed it over to the vengeance of its enemies. He then proceeded to restore the imperial authority over the other towns of Lombardy, but his savage treatment led to a general insurrection in which

for a time local feuds were forgotten. After the victory of Legnano in 1176, the Lombard republics regained their independence, but the rivalry between the imperial and papal powers, taken up by their respective partisans the Ghibelines and Gueifs, introduced a new element of contention into the already stormy politics of northern Italy. Leagues were formed again and again between different cities on the new lines of cleavage, and, as was natural in a state war, under the cover of great principles various self-seeking tyrannies were established. During the 13th century there were four great groups of city-states to be found in northern Italy. The first included the cities of central Lombardy, Milan, Cremona, Pavia, Brescia, Bergamo, Parma, Piacenza, Mantua, Lodi, Alessandria, and others less known. The second group consisted of Verona, Vicenza, Padua, and Treviso. Another group was composed of the cities in Romagna, Bologna, Modena, Imola, Faenza, Ferrara, and others less important. The fourth cluster comprehended the whole of Tuscany, headed by Florence and Pisa. Sometimes, the Ghibeline faction, sometimes the Gueif faction got the upper hand, and, according to the rise and fall of each, fresh wars and fresh alliances were entered into. We have an interesting account of the condition of Milan in 1288, from Galvaneus Flamma, a Milanese writer. The inhabitants are reckoned at 200,000, and the private houses at 13,000; the nobility alone dwelt in 60 streets, 8000 gentlemen or heavy cavalry might be mustered from the city and its district, and 240,000 men capable of bearing arms. In the district were 150 castles with their adjoining villages. The wealth and enterprise of the Milanese was astonishing, as was shown especially in the construction of the canal from the Tesino to the city, and the architectural splendour of the buildings. Their military ardour and commercial activity were equally conspicuous. The government of Milan and of the other Italian city-states was subject to continual change. In most of them the magistrates, elected after they threw off the rule, in the 10th and 11th centuries, of the count or imperial official or bishop, were styled in Roman fashion consuls. They were chosen annually, and generally from the ranks of the nobility; and they formed the responsible civil and military executive. There were besides legislative and deliberative councils. A council of trust and secrecy, consisting of a small number of persons, formed the advisers of the consuls; but the decision of high state affairs, such as treaties of alliance and declarations of war, the choice of consuls and ambassadors, rested with the general council of a more or less democratic type. About the end of the 12th century, as a result of the imperial intervention of Frederick Barbarossa, the custom arose in many cities of appointing, as a kind of temporary dictator, a

citizen of some neighbouring state, though invariably a man of noble birth. He was called *podestà*, and held office for a year, though re-eligible. He received a fixed salary, and was compelled to remain in the city after expiration of office for answering charges brought against him. He could neither marry a native of the city nor have any relation resident in the city, nor even—so great was the fear of his being involved in the feuds and factions of the city—eat or drink in the house of any citizen. He was regarded as the highest arbitrator in all disputes, and sometimes superseded the consuls and commanded in war. There was great need of such an arbitrator in the Italian cities, where there were continual quarrels between the various noble families, and between them and the commonalty. The latter, composed of the artisans, were generally arranged into companies according to their occupations; and these fraternal guild associations were set over against the alliances of the nobility. The quarrels between social classes were further intermingled with the quarrels between political partisans, looking to the German emperor or the pope as their respective heads; while both kinds of quarrel were further embittered by personal outrages such as we read of in Dante and Shakespeare. Whoever conquered in these intestine conflicts, the state suffered from the merciless revenge of the conquering party, till at last the cities of Italy, like those of ancient Greece, were glad to be controlled by the strong though often cruel hand of some one family which established a quasi-hereditary despotism. At Milan, first the Torriani and then the Visconti raised themselves to power, and the latter gradually extended their sway over central Lombardy, overthrowing the reigning nobility in surrounding cities, and finally forming alliances with the French monarchy which in turn invaded and conquered north Italy. The history of the Tuscan is similar to that of the Lombard cities. Florence played the part of Milan. There too there was originally a more or less democratic constitution. The population was divided into fourteen companies or *arts*, the seven greater arts each electing a council of its own, with a chief magistrate or consul for civil jurisdiction, and a *gonfaloniere* for military affairs. Criminal justice was administered by a *podestà* and a *capitano del popolo*. But gradually, after many trials of various constitutions, political power became centred in the hands of some powerful family, till at last, in the 15th century, the famous Medici ruled supreme.

While Milan and Florence were gradually asserting their supremacy over the territory of northern and central Italy, three maritime cities, Pisa, Genoa, and Venice, were pushing their conquests over the Mediterranean Sea. It was these Italian cities that, after the general

disturbance of Europe caused by the irruption of the various tribes of barbarians and the devastating conquests of the Mohammedans, first succeeded in reviving the commerce of the Mediterranean world. As early as the age of Charlemagne, they had begun to carry on trade with the Greek cities, and imported to their own countries the rich commodities of Asia. In the 10th century the Venetians had formed a connection with Alexandria in Egypt, and the inhabitants of Amalfi and Pisa had also extended their trade to the same port. Later on, the crusades had poured riches into the laps of Venice, Genoa, and Pisa alike. These cities provided the necessary transports, and received enormous sums for their services as carriers. The crusaders also contracted with them for military stores and provisions, and the fleets of these cities kept on the coast, while the armies advanced by land, and during that advance sought every opportunity of promoting their commercial interests. Charters were granted to them, whereby they soon secured most extensive privileges in various settlements made by the crusaders in Asia. The property of entire suburbs in some, and of large streets in others, was vested in them, and the right of appointing their own magistrates assigned. When the crusaders seized Constantinople, the Venetians secured a part of it, and also part of the Peloponnesus in Greece and some of the islands of the Archipelago. With the conquest of many important maritime points in the eastern Mediterranean, trade with Asia revived. The Italian cities not only imported Indian commodities, but established manufactures of delicate fabrics in their own country, especially of silk. Silk weavers were kidnapped from the east of Europe, and settled in Italy, and silk stuffs gradually spread through Europe. The sugar-cane, indigenous in the east, was likewise imported into and cultivated in the west, whence it was eventually transported to America. After the decline of Pisa, partly owing to the rivalry of Genoa and the growing power of Florence, which conquered it early in the 15th century, Genoa contended with Venice for the commercial supremacy of the Mediterranean. Genoa had more especially command of the western Mediterranean and the northern part of the Archipelago and the Bosphorus. Caffa, a famous seaport on the Black Sea, and the port of Azov on the mouth of the Don, belonged to the Genoese, and served as *entrepôts* for their overland commerce with China and the Indies. Smyrna in Asia Minor, and the suburbs of Pera and Galatz at Constantinople, and the isles of Scio and Tenedos were ceded to them by the Greek emperors, and at one time they had the kings of Cyprus as their tributaries. Venice, starting from a more secure position in the lagoons of the northern Adriatic, pushed its conquests on the adjoining coasts of Dalmatia,

Albania, Greece, and the Morea, and gradually secured settlements in Corfu, Cephalonia, and Crete. Genoa and Venice inevitably came into collision in the 14th century; and in the war of Chioggia, 1376-82, the famous Genoese admiral Peter Doria nearly succeeded in capturing Venice, which was only saved by the courage and energy of the Venetian admiral Vittorio Pisani. After this victory, Venice more and more secured her ascendancy on the Syrian and Egyptian coasts, and the consequent trade with the east, till the discovery of the new sea route by the Cape of Good Hope handed over the oriental trade to the Portuguese and Dutch. The Italian traders naturally proceeded to find markets in western, central, and northern Europe, and to exchange their own commodities with those of other European countries. They were allowed the most extensive immunities in France in the 13th century, even greater than those granted to native inhabitants. As the Lombards, a name generally given to the Italian merchants, engrossed the chief trade of Europe, they became the chief bankers of Europe. By the church their money-lending was denounced as sinful and criminal, and, as a consequence, the interest charged was all the higher on account of the insecurity of their dealings, reaching even to 20 per cent. The chief northern mart for Italian goods was at Bruges. The sea voyage from the Mediterranean to the Baltic being of too prolonged a nature to be carried on in one summer, it was necessary to find some *entrepôt* or half-way centre for trade, and this was placed at Bruges. Here they exchanged the wool of England, the linen of the Netherlands, the furs, fish, and hemp of the Baltic for the silks, and spices, and silver of the south. The great galleasses, in which they carried their goods were the wonder of the north. At the beginning of the 13th century Bruges was famed as the greatest emporium of northern Europe, and the Hanseatic league of the Baltic cities established also their centre there, while Ghent and Ypres looked to it as their most powerful ally in their struggles with feudalism. For two centuries Bruges held its place, but the gradual closing of its channels, side by side with the increase of the size of trading ships, finally gave the supremacy to Antwerp. During the 15th and 16th centuries Antwerp surpassed all the ports of Europe in its commerce, and in 1568 its population reached 103,000; a civic population only exceeded by that of Paris. Its supremacy was destined in the following centuries to pass to London.

In Spain, although the cities, owing to the strength of the feudal nobility and the growth of the monarchy, never reached the complete independence of the Italian and German towns; yet in very early times, owing to the exigencies of the struggle with the Moors, the towns

of Castile and Aragon were invested with very important privileges or charters, on the condition of protecting their country. They had the right of appointing their own magistrates and common councils, which exercised civil and criminal jurisdiction over the inhabitants not only of the towns but also of extensive areas round them. They were bound in turn to pay certain sums and provide a certain force of armed men, horse and foot. Toledo, Saragossa, Valladolid, and others, became noted for their splendid enterprise. Barcelona, as a seaport, attained a special height of prosperity and power, and vied with the Italian cities on the seaboard in trade with Alexandria and the east. Its maritime laws are among the earliest mercantile jurisprudence of modern times, and were adopted by the Italian states. With other Spanish cities it secured special privileges in France, similar to those of the Italian towns; and Spanish silk and woollen goods, and the spices, drugs, and perfumes, imported from the east, spread far and wide in Spanish bottoms. See Prescott (*Ferdinand and Isabella*), vol. i. pp. 64-68.

Since the beginning of the 10th century, towns had been growing up in northern, southern, and western Germany, especially where the sea or rivers formed the easiest and safest means of communication, or where the traditions of Roman colonies had been handed down through the times of barbaric invasion. Lübeck, Hamburg, Bremen, and Frankfort, Cologne, Treves, Mainz, Strasburg, Worms, Speyer, Nuremberg, Ulm, Regensburg and Augsburg, and others gradually became places of importance, resting on the protection of imperial authority, and ready to fight for further privileges with the ecclesiastical or feudal oligarchy. During the 11th and 12th centuries these powers more and more extended under imperial encouragement, and towards the end of the latter century we find them electing councils of citizens, and in the following century appointing their own magistrates. The growing weakness of the empire naturally led to greater independence, and when, towards the end of the 13th century, the Hapsburg family succeeded to the imperial throne, we find the cities taking their place in the diet side by side with the feudal and ecclesiastical princes. In their struggle for freedom the cities found it necessary to form alliances. In the north there arose, about 1241, the famous HANSEATIC LEAGUE (*q.v.*), initiated by the cities of Lübeck and Hamburg. Their example was followed in 1255 by sixty cities forming the League of the Rhine. In 1370 this league was extended for a time by the adhesion of the cities of Swabia, while farther south the Swiss cities of Lucerne, Zurich, Glarus, Zug, and Berne joined with the three famous cantons of Uri, Schwyz, and Unterwalden in winning republican independ-

ence. Each of these German and Swiss towns formed rallying centres for the victims of feudal oppression, and kept alive the spirit of civic and industrial freedom.

[Adam Smith, *Wealth of Nations*, bk. iii. ch. iii. and iv.—Anderson, *Commercial History*.—Bryce, *Holy Roman Empire*.—Freeman, *Essays*, vol. ii.—Gibbon, *Roman Empire*.—Guizot, *Civilization of Europe*.—Hallam, *Middle Ages*.—Koch, *History of Europe*.—Marshall, *Political Economy*.—Motley, *The Rise of the Dutch Republic*.—Prescott, *Ferdinand and Isabella*, Charles V.—Sismondi, *Fall of Roman Empire*, *Histoire des Républiques Italiennes du Moyen Age*.—Zimmern, *Hanse Towns*.—*Ency. Brit.*, 9th ed., art. on "Hanseatic League" by R. Lodge.] A. K. C.

FREE TRADE, THEORY OF. The term "free trade," or freedom of trade, at first used somewhat vaguely to denote absence of restraint in general, has now acquired a definite specialised sense. To MISSELDEN (*q.v.*), 1622, it meant "the free export of bullion"; to the opponents of the ADVENTURERS, MERCHANT (*q.v.*) "the abolition of the monopoly held by that body"; in the time of Sir Walter Scott "free-traders" meant smugglers (see *Guy Mannering*), at the opening of the 18th century, and in 1782 in Ireland, "the right to export freely." Adam Smith's authority, and the direction given by him to economic thought, have caused its limitation to that system of commercial policy which draws no distinction between domestic and foreign commodities, and, therefore, neither imposes additional burdens on the latter nor grants any special favours to the former. Free trade in this now well-established sense does not require the removal of all duties on commodities; it only insists that they shall be levied exclusively for revenue, not at all for PROTECTION (*q.v.*). "Our object," said Cobden, "is not to take away the queen's officers from the custom-house, but to take those officers away who sit at the receipt of custom to take tithe and toll for the benefit of particular classes" (*Speeches*, pop. ed. p. 41).

Free trade as a practical policy is based on the economic theory of INTERNATIONAL TRADE (*q.v.*), which explains the nature of the benefits obtained through foreign commerce, and shows that it is only carried on so long as it yields a gain to those concerned. But "if," as Cairnes urges, "nations only engage in trade when an advantage arises from their doing so, any interference with their free action in trading can only have the effect of debarring them from an advantage" (*Leading Prin.*, pt. iii. ch. iv. § 1). Foreign trade is a particular form or species of EXCHANGE (*q.v.*), and its utility is therefore at a maximum when impediments to its action are completely removed. The free trade doctrine thus rests on the most elementary economic facts, and is so simple as almost to appear trivial. The operation of free trade is negative; by removing obstacles it affords room for the

working of the normal and beneficent forces of commerce.

Again, free trade—to slightly change the point of view—has a reactive effect on production.

DIVISION OF LABOUR (*q.v.*) only becomes possible by means of exchange, which permits each industrial group to confine its efforts to the most profitable employment, and to satisfy its various wants by exchange with other bodies. Elaborate and efficient production almost necessarily implies a developed system of trade. This is particularly true where specialisation of industry is due to local advantages. "The territorial division of labour," which forms no small part of the general movement, is in great measure dependent on facilities for foreign commerce, and is therefore promoted by the establishment of free trade. Each country can devote itself to those forms of production in which it has a comparative advantage (see **INTERNATIONAL TRADE**), and obtain from foreigners all other commodities. Individuals "find it for their interest to employ their industry in a way in which they have some advantage over their neighbours"; and, as Adam Smith proceeds to observe, "what is prudence in the conduct of every private family can scarce be folly in that of a great kingdom" (*Wealth of Nations*, ed. Nicholson, p. 185). Thus regarded, free trade appears to be an obvious dictate of common sense rather than the product of refined and difficult theory, a circumstance which accounts for the somewhat scornful tone that many advocates of commercial liberty have used towards opponents. There are, however, some complicating conditions which render the argument from division of labour harder to follow in foreign than in domestic trade. The individual producer has little difficulty in perceiving that a special line of work is more profitable to him than the attempt to directly supply all his wants by his own exertions. To the nation the first effect of foreign trade seems to be the displacement of so much home industry, with resulting loss to the supplanted producers. Hence the necessity for showing that an "imported commodity is always paid for directly or indirectly with the produce of our own industry," and "that the alternative is not between employing our own people and foreigners, but between employing one class and another of our own people" (Mill, *Principles*, bk. v. ch. x. § 1). Imported goods must undoubtedly be paid for, and, normally speaking, be paid for by the export of native products; but some power of analysis is needed to realise this truth amidst the complications of trade. Adam Smith meets the difficulty by insisting that "the general industry of the society never can exceed what the capital of the society can employ" (*Wealth of Nations*, p. 183), and that therefore regulations of commerce can only divert a part of that capital into an artificial direction. The individual is, however,

able to determine the most profitable direction for the employment of his capital far better than the "statesman or lawgiver"; and he is urged to so use it by the stimulus of self-interest. Mill's "first fundamental proposition," viz. "that industry is limited by capital," with its corollary, that "demand for commodities is not a demand for labour," serves the same purpose (*Principles*, bk. v. ch. x. § 1). The optimistic doctrine of the *Wealth of Nations*, with its belief in the guidance of "an invisible hand" (bk. iv. ch. ii.), is replaced by the Ricardian theory of foreign trade, which assumes both the domestic mobility and the international immobility of labour and capital (cp. Bagehot, *Economic Studies*, p. 67), but either suffices as a basis for the free-trade position. Nor is it essentially altered by modern developments of the theory of **WAGES** (*q.v.*). Even if capital is not the sole limit to industry, and if efficiency in work is also to be taken into account; still as free trade tends to increase general efficiency, it follows that the "produce theory" of wages gives quite as valid a support to the policy of freedom. This general argument is strengthened by reference to the statistics of trade, and by consideration of the elements that make up international indebtedness (see **COMMERCE**), from which it appears that imports and exports stand in a definite relation to each other. The intervention of **MONEY** (*q.v.*), a potent cause of economic fallacies, further obscures the case; but the cardinal principle, that foreign like domestic trade is fundamentally barter in which goods are exchanged for goods, throws light on this side of the question. It is shown that a permanently favourable **BALANCE OF TRADE** (*q.v.*) is an impossibility, and even were it attainable, that it would not be advantageous, since the undue accumulation of the precious metals means the locking up of what would otherwise be productive capital.

By the analysis and exposure of the fallacies connected with (1) the sources of employment, and (2) the nature of the circulating medium, the argument for freedom of trade as a general rule has become a part of practical economics, and has been largely accepted by the educated public, and even recognised as the ultimate goal by such representative protectionists as **LIST** and **CAREY**. But its admission in the vague shape of an "abstract principle" or "theory" has not hindered the existence of widespread dissent to its reduction to "practice," a hostility not wholly due to ignorance and the influence of particular interests. Exceptions to free trade may be urged either on the ground of special economic conditions or by appealing to wider considerations than those relating to material wealth. Cases of both kinds are to be found in the *Wealth of Nations* (bk. iv. ch. ii.). Of the former the most important is that of temporary protection in order to encourage the development of infant industries, which, feeble

at first, will ultimately become self-supporting. This case requires the balancing of present against future advantage: immediate gain is to be sacrificed for a larger one at a later time. Such a policy applied to manufactures in general is the "industrial protective system" of List, regarded by him as suited for a particular stage of economic development. Its validity—with, however, stringent limitations—is conceded by Mill (*loc. cit.*), and more unreservedly by Prof. Sidgwick (*Pol. Economy*, bk. iii. ch. v. § 1), and Roscher (*System*, vol. iii. § 138). Adam Smith's contention that individual enterprise is a better guide for industry than the dictates of governments, seems, as he himself held, to be fully applicable here. The difficulties in selecting the industries to be encouraged, and the amount of protection required by each, have been justly dwelt on by free traders (see especially Wise, *Industrial Freedom*, pt. iv. ch. ii. and app. ii.) who have further asked without much result for evidence of the successful use of protection for this purpose. Thus, while it is theoretically possible that the temporary protection of a particular industry might yield a surplus of advantage, it is plain that the discovery of such an instance will be much rarer than the injurious employment of the same instrument in unsuitable cases (see BOUNTIES).

Protection may also be sought on like grounds, for older industries become for the moment unprofitable through a temporary disturbance in trade conditions (Sidgwick, *Pol. Econ.*, bk. iii. ch. v. § i.), and should be tried by the same tests.

The foregoing argument has some affinity with the plea that diversity of industry is economically beneficial, especially in a new country, and therefore deserving of encouragement. The advantages of the "home market" as affording a steady demand, and saving the cost of transport, have been unduly emphasised by protectionists with curious disregard of the fact that cost of carriage is a natural protection to the home producer, and only overcome by the greater benefit of foreign trade. Experience, besides, does not confirm the belief that fluctuations are less frequent in a limited market, nor does it show that diversity of industry is incompatible with complete freedom of trade.

In like manner the possibility of enlarging the national market by causing immigration of labour and capital, or of hindering its contraction by checking their efflux, has been alleged as a good reason for the use of protection, and the claim has been theoretically admitted by some economists (e.g. Prof. Sidgwick, *Pol. Econ.*, bk. iii. ch. v. § 3). Unless, however, in the case of a country possessing the sole or chief market for a commodity, it is hard to see how the imposition of duties will even tend to draw in labour, as the cost of living will almost certainly be higher,

while the investment of foreign capital will depend on the prospect of a high return, which is not likely to be increased by the adoption of protection.

A much more plausible argument for departing from the free-trade rule is that based on the idea of preserving national resources. A country's mineral stores form a stock which is being gradually worked out, and it may be held that protective duties on imports will act as a check to their too rapid use (*cp.* Jevons, *Coal Question*, Preface). Again, as Carey urges, food-exporting countries may exhaust the fertility of their soil—or to take a further step in refinement of the doctrine—may find the Margin of Cultivation pushed to a lower point. Thus the community experiences the same effects that would follow from an increased population at home (*cp.* S. N. Patten, *Economic Basis of Protection*, pp. 47, 48). On the other hand, the gain to the landowners, and therefore to the revenue of the society from an increase in rent must be taken into account as well as the cheaper terms on which imports are obtained under free trade; and on the balance it is probable that even in so peculiar a case the advantage would be on the side of freedom.

On the border between economic and political exceptions is the proposal to make freedom of trade dependent on reciprocity. If based on the belief that trade to be advantageous must be free on both sides, the idea is clearly fallacious, but where it simply aims at removing foreign protective duties and thus securing wider freedom of trade in the future, it "may be good policy," as Adam Smith (*Wealth of Nations*, p. 190) asserts, since "the recovery of a great foreign market will more than compensate the transitory inconvenience" of retaliation. Here, however, as in respect to infant industries, the probability of success is much smaller than that of failure, owing to the inevitable irritation produced in foreign countries by retaliation, which leads to increase rather than reduction of protective duties.

All the preceding cases have often been supported on non-economic grounds, but chief stress has been laid on the economic gain to be sooner or later derived. Different in kind is the preference of national security to increase of wealth, which formed the strongest argument in support of the CORN LAWS and the NAVIGATION LAWS, and which actually won for the latter the favourable judgment of Adam Smith (bk. iv. ch. ii.), and of J. S. Mill, who, however, approved of their repeal. In such instances the question is one for the statesman rather than the practical economist, but in making a calculation the economic loss, though not of itself decisive, should never be dropped out of sight, as opulence is one of the chief elements of political and military power.

Social protective duties (*sociale Schutzzölle*) have been advocated in order to hinder the degradation of labour, in consequence of the pressure of foreign competitors working under inferior conditions of life, and in countries with stringent FACTORY LAWS (see also FACTORY ACTS) the plea has in certain cases an apparent force. In its more extreme form, as in the United States, where protection against the "pauper labour" of Europe is a popular cry with the opponents of free trade, it is only a repetition of the fallacy already noticed that free trade reduces the amount of employment, and it also erroneously assumes that with unrestricted commerce wages will everywhere fall to the lowest existing level, though it is obvious that IMMIGRATION of poorly-paid foreign labour, which is the real cause of lowered wages, may happen under, and even be stimulated by, the most rigid protection.

On the whole it does not appear that the various exceptions suggested to the broad canon of free trade have much practical weight, at least in the present stage of social development, though they suggest some interesting qualifications of economic theory. Some of them are connected with the possible evils that accompany extended division of labour—evils not sufficiently recognised by the older English writers, but nevertheless of serious social import. They further bring out the varying consequences that follow from the action of industrial effort according as it is placed under the law of INCREASING RETURNS or under the law of DIMINISHING RETURNS, and show, as Mill had briefly noticed (*Principles*, bk. v. ch. x. § 1), that agricultural and manufacturing communities are not affected in the same way by free trade. The "infant industry" argument gains its force from the consideration of time; it appeals to the future as against the present. The real nature of national interest, and its possible divergence from the individual interests of producers and consumers, have been brought into stronger relief, without, however, invalidating the proposition that in the main the interest of the community is served by the widest freedom.

The result then is that the practical policy of free trade is a sound deduction from established economic doctrines, and that any proposed exception must be clearly made out by its advocates, on whom the burden of proof rests, and who are bound not merely to adduce special circumstances that appear to favour the claim, but to take into account all the surrounding conditions, and to give due weight to each. Submitted to such a test, the most plausible cases for interference with the normal course of trade turn out to be theoretical subtleties, not practicable or advisable expedients.

[The literature of the subject is too extensive for adequate notice. Adam Smith, *Wealth of Nations*,

bk. iv., is the source of the most effective free-trade arguments. The petition of the merchants of London, 1820 (in *Wealth of Nations*, ed. McCulloch, note 15), drawn up by Thos. Tooke (Tooke and Newmarch, *History of Prices*, vol. vi. p. 335), summarised them most concisely.—F. Bastiat, *Sophismes Économiques*, Œuvres, tomes iv. and v., contain the most brilliant exposure of popular fallacies.—W. G. Sumner, *Protectionism*, New York, 1883, and B. R. Wise, *Industrial Freedom*, 1892, deal with the latest phases of the controversy. See also references given above, and for writers who have opposed, see articles on A. A. CURNOT; and PROTECTION.] C. F. B.

FREE TRADE, EARLY HISTORY OF. The free-trade agitation of the 19th century, itself only one phase of the growth of the competitive system, was the last though not the final stage of a great movement extending over several centuries. As we may expect, therefore, the expression "free trade" has different meanings at different periods in the economic history of the country. The foreign merchants of the middle ages who desired to obtain a footing in England on a free-trade basis, meant by this expression that, subject to the payment of the usual customs, they should be allowed to exercise their calling in English ports and mart towns without let or hindrance; that they should not be subjected to unreasonable exactions; that their ships and goods should not be arrested without due cause, etc. The English "free trader" of the latter part of the 16th century wished to see the revival of the regulations of the STAPLE system, and the withdrawal of the privileges of exclusive trading companies, such as the Merchant Adventurers. In the 17th century he meant the broadening of the basis of the companies, so that all who desired might obtain admission on easy terms. There were also some writers, such as Roger Coke (*q.v.*), who clearly perceived the advantages of free importation, of the repeal of the navigation acts, and of the acts restricting certain trades, such as the cattle and woollen trades of Ireland, and who advocated the more enlightened policy of the Dutch in the regulation of commerce. The free trader of the 18th century advocated the removal or reduction of duties on imports and exports, but at this time he seldom belonged to the commercial classes. It is impossible, therefore, to understand the significance of the various phases of the free-trade movement, apart from the general economic conditions which prevailed when each phase became prominent. From the standpoint of to-day, for example, the elaborate regulations of Edward III.'s great Ordinance of the Staples appear unwise and oppressive. But the experiment of dispensing with staple towns had been tried and had led to bad results. In the policy he adopted with regard to foreign merchants, he was singularly favourable to their claims; and many of his statutes were intended to give security to

traders, to repress lawlessness, to provide means of settling disputes, or to place the collection of customs on a satisfactory basis. These elaborate regulations, so far from being a restraint on trade, were frequently the means which made trade possible. Moreover it does not appear to have been difficult to obtain exemption from the staple acts when it could be shown that such a course was advantageous, and throughout the middle ages there were numerous bodies of merchants, such as the Hanse merchants, the merchants of Florence, Venice, etc., who enjoyed such privileges. So also, the elaborate commercial treaties of the 14th and 15th centuries have been too hastily condemned by some writers. If they had been arbitrarily imposed by governments on unwilling communities where there had formerly been free exchange of commodities, and where there were all the conditions requisite for peaceful and uninterrupted commerce, they would have been an unwarrantable interference with the course of trade. But these assumptions would be incorrect. Though unwise regulations were frequently adopted, the effect of the commercial treaties was to assimilate the conditions of different countries and communities, to build up the fabric of international law, and to extend trade far beyond the limits which would have been possible in a state of perfect freedom. With the growth of capital and industry, the rise of a manufacturing class, and the development of a national foreign trade which took place in the 15th century, the prevailing hostility to foreigners became more strongly marked. The demand arose for the encouragement of native commerce, and the protection of English industries. The reign of Edward IV. is full of acts of parliament passed with this object, and from this time onwards we can note the gradual development of the great protective system which was not overthrown till our own day. The privileges enjoyed by foreign merchants were restricted. Those of the Hanse merchants, who attained their greatest influence in England in the 15th century, were suspended by Edward VI., and after a partial renewal under Mary and Elizabeth, were finally withdrawn by the latter. English trading companies were incorporated, protective tariffs imposed, corn laws and navigation acts were passed, and the country was apparently getting deeper and deeper into a narrow national policy. We cannot here discuss the question how far the mercantile system achieved the objects which its advocates had in view (*vide* ENGLISH EARLY ECONOMIC HISTORY; HANSE-ATIC LEAGUE; MERCANTILE SYSTEM; NAVIGATION ACTS). The period which saw its growth saw also the growth of the forces which led to its final overthrow. Throughout their history the policy of confining the foreign trade of the country to exclusive trading companies was

subjected to much hostile criticism. It was assailed in Parliament, and in the works of economic writers. The regulations of some of the companies were modified to meet the claims of outsiders; Cromwell tried the experiment of a free and open trade with the East Indies; privileges were granted to bodies of merchants in contravention of the charters of the companies; in a great debate at the committee on trade in 1657, only two persons were favourable to the Merchants Adventurers, while all the other members were for the free merchants. There were many men like Ralph GARDINER (*q.v.*), who were willing to suffer much in the struggle against monopoly; and after the revolution of 1655, few of the old companies are of great practical importance except the EAST INDIA COMPANY (*q.v.*), which itself was reorganised on a national basis. With the 18th century the movement for the removal or reduction of duties on imports and exports becomes important. It can best be traced in the history of the commercial treaties of the period and the negotiations which led up to them, *e.g.* the METHUEN TREATY with Portugal (1703), the Treaty of Utrecht (1713), the commercial clauses of which were drafted by Arthur Moore, and W. PITT's commercial treaty with France (1786). In the first we have a typical treaty framed on the principles of the mercantile system. "The Methuen Treaty" said Fox in 1786, "had justly been considered as the commercial idol of England." The eighth and ninth clauses of the Treaty of Utrecht raised a storm amongst the commercial classes, for they were an attempt to move in the direction of free trade with France. It was found impossible to carry them, though the principles they embodied were most ably advocated chiefly by Arthur Moore in Parliament, and by Defoe in *Mercator*. Pitt's treaty, avowedly an attempt to carry into effect the teaching of Adam Smith, was passed without serious opposition,—"No great manufacturing body of men" said Pitt, "had taken alarm,"—and during the short period of its operation before the outbreak of the war with France it was very successful. Many other illustrations of the growth of free-trade principles during the 18th century may be given, such as Walpole's commercial and colonial policy, Pitt's Irish propositions, etc. The principal obstacle in their way was the bitter hostility of the commercial classes. But there can scarcely be any doubt that but for the French revolutionary war, and the difficulties into which it plunged the country, Pitt would have anticipated by fifty years the later free-trade movement.

W. A. S. H.

Free trade principles were early maintained in France by the economists, being a natural deduction from their principle of *laissez-faire* and a necessary corollary to their doctrine

that freedom in exchange, an absolutely unshackled use of the wealth of individuals, could not be dissociated from the full enjoyment of the rights of private property (see DUPONT DE NEMOURS; ÉCONOMISTES; ÉPHEMÉRIDES; PHYSIOCRATS; QUESNAY and Turgot).

FREE TRADE.—MODERN HISTORY OF. The history of the modern movement in favour of free trade practically begins with the year 1786, when Pitt concluded a commercial treaty with France which abolished many of the protective duties between the two countries. Ten years before, however, a great impetus had been given to free-trade doctrines by the publication of Adam Smith's *Wealth of Nations*. Yet the protective system was so interwoven with our commercial policy at home and abroad, that no really successful assault could be made upon it until nearly forty years after the passing of Pitt's French treaty. With the appointment of WILLIAM HUSKISSON (*q.v.*) as president of the board of trade in 1823, a complete change came over the commercial policy of England, and the bulwarks of protection began to give way. In the session of 1823 Huskisson carried his Reciprocity of Duties Bill, a measure which largely modified the effects of the NAVIGATION ACTS (*q.v.*), by freeing English and foreign shipping. He next reduced the duty on raw and spun silk, and lowered the import and export duty on wool. The right of free emigration was restored to artisans, and the laws controlling the combinations of either masters or workmen were repealed. "These were the beginnings of free trade; but a further development of political liberty was essential to the triumph of that generous and fruitful policy" (Lord Farnborough's *Constitutional History of England*, vol. ii.).

Various efforts to regulate the price of corn by act of parliament were made in 1773, 1791, 1804, 1815, and 1822; but in consequence of the ill effects of such legislation in 1825-26—years of severe commercial panic—the privy council was authorised to issue orders to suspend the operation of the acts, and to permit the importation of foreign corn under circumstances of necessity. Grave doubts now arose as to the soundness of a protective policy and the beneficial operation of the corn laws; and during the brief administration of George Canning in 1827, that brilliant and progressive statesman carried resolutions in the House of Commons pointing to a more liberal policy. A relief bill based on the resolutions passed the Lower House, but owing to Canning's death and the opposition of the Duke of Wellington in the Lords, the measure was lost. In 1828, when the Duke had assumed office, with Peel and Huskisson among his colleagues, the duties on foreign corn were regulated in accordance with a new sliding scale. By an act passed on

the 15th of July the import duty on wheat was to be 25s. 8d. per quarter when the average price in England was under 62s.; 24s. 8d. when from 62s. to 63s.; and so to be gradually reduced to 1s. when the average price was 73s. and upwards.

Catholic emancipation and parliamentary reform now absorbed public attention for some years, and nothing further was done to remedy the grievance of the corn laws. The abundant harvest of 1835 came as a slight relief by making bread cheaper for the people, and the year 1836 witnessed no direct action in parliament on free-trade questions. But early in 1837, in consequence of the deficient harvest in the previous autumn, followed by a commercial collapse, an anti-corn law association was formed in London. On the committee were twenty-two members of parliament, including George Grote the historian, J. Silk Buckingham, founder of the *Athenæum*, T. S. Duncombe, Joseph Brotherton, W. Clay, Joseph Hume, J. A. Roebuck, Colonel Perronet Thompson, and Sir W. Molesworth. Three popular writers and poets—Thomas Campbell, Ebenezer Elliott, and William Howitt—were also upon the committee. In the House of Commons, Mr. Clay endeavoured to procure a modification of the corn laws. He moved the adoption of a fixed impost of 10s. per quarter on wheat, in lieu of the sliding scale of duties, but his resolution was lost by 223 votes to 89. In September 1838, Dr. (afterwards Sir John) Bowring addressed a meeting of fiscal reformers at Manchester, which had been hastily called together by Mr. A. Prentice. A proposition to form an anti-corn law association was welcomed with enthusiasm. A preliminary meeting, attended by seven earnest reformers, was held on the 24th of September, and on the 13th of October there was published in the *Manchester Times* a list of thirty-eight gentlemen, as a "Provisional Committee of the Manchester Anti-Corn Law Association." The name of John Bright appeared in this first list, and that of Richard Cobden in the second list, issued a week later. A young medical student named Paulton delivered eloquent lectures in various towns on the advantages of free trade, and Lancashire was soon stirred to action. On the motion of Mr. Cobden, the Manchester chamber of commerce petitioned parliament against the corn laws. The free-trade organisation assumed a larger character in 1839, and became formally known as the National Anti-Corn Law League. A journal entitled the *Anti-Corn Law Circular* was established to advocate the movement. Mr. C. P. Villiers, one of the earliest pioneers of the advancing cause (b. 1802, d. 1898), now took the lead in parliament, and annually brought forward his resolution in favour of free trade. In March 1839 his motion for a committee on the corn laws was rejected by

342 to 195, and in 1840 by 300 to 177. Lord Fitzwilliam's resolutions in the House of Lords condemnatory of the corn laws were rejected in 1839 by 224 votes to 24, and in 1840 by 194 to 42. During the debate in the Lords on 14th March 1839, the premier, Lord Melbourne, said, "To leave the whole agricultural interest without protection, I declare before God I think it the wildest and maddest scheme that has ever entered into the imagination of man to conceive." In the session of 1840, 763 petitions, with 775,840 signatures, were presented to the House of Commons against the obnoxious laws. In the session of 1841 ministers proposed a fixed duty of 8s., but no measure was brought in owing to the dissolution. Sir Robert PEEL (*q.v.*) came into power in September, and in the ensuing winter there was such terrible distress in all the great centres of population that a conviction gained ground of the absolute necessity for some change in the restrictive laws which pressed so heavily upon the community.

Early in 1842 Mr. Bright stepped into the front rank of the repealers, and created much effect by his earnest eloquence. With Cobden, Villiers, and Wilson, he was instrumental in forming many provincial branches of the league. The government was now moved to action, and in the session of 1842 Peel carried his new sliding scale. By this, there was to be 20s. duty when the price was at 51s., decreasing to 12s. at 60s., and 1s. at 78s.; the duty was not to exceed 20s. when the price fell below 51s. An amendment in favour of a fixed duty, proposed by Lord John Russell in the Commons, was rejected by 349 to 226, and a similar amendment proposed by Lord Melbourne in the Upper House was lost by 207 to 71; an amendment in favour of total repeal proposed by Mr. Villiers in the Commons was rejected by 393 to 90, and a similar amendment brought forward by Lord Brougham in the Peers was lost by 109 to 5. The second reading of the Sliding-scale Bill in the Lords was carried by 119 to 17. To meet the growing deficit in the revenue, which had now become very serious, Peel brought in a bill for the imposition of an income tax of 7d. in the pound, to be levied for three years. But in order to alleviate the new burden, he either partially or wholly abolished the duties on numerous important articles, such as drugs, butter, eggs, cheese, lard, dye-woods, cattle, sheep, pigs, and salted meat. The Manchester Free Trade Hall, built by the repealers on the site of the Peterloo massacre, was opened 30th January 1843. At the inaugural meeting subscriptions of £40,600 to the league fund were announced. In February, the House of Commons was invited by Lord Howick to discuss the question of free trade on a side issue, when his lordship moved for a committee to inquire

into the distress of the country. During the debate a strange scene occurred. After a powerful speech by Mr. Cobden in favour of repeal, Sir Robert Peel rose, and in his excitement indirectly insinuated that Mr. Cobden was inclined to favour his assassination. The unhappy incident arose out of a misinterpretation put upon certain words by Mr. Cobden. The premier's overwrought feelings were further intensified by the attempt upon himself which had resulted in the death of his secretary Mr. Drummond. The affair passed over, and Lord Howick's motion was rejected by 306 to 191 votes. Votes of sympathy with Mr. Cobden were passed at various public meetings. In the spring of 1843 the league held a series of demonstrations in Drury Lane Theatre. Lords Russell and Montague brought forward motions in parliament to inquire into the effects of Peel's sliding scale, but they were rejected in the Commons and Lords respectively by 244 votes to 145, and 200 to 78. Mr. Villiers's motion for total repeal was rejected this year by 381 to 125, but in the minority were several prominent and ex-official whigs. The council of the league distributed, in 1843, tracts, and publications, etc., to the number of 9,026,000. It was also determined now to raise a fund of £100,000 to further the objects of the league. In March 1844 Mr. Cobden moved for a committee of the House of Commons to inquire into the effects of protective duties on agricultural tenants and labourers, but he was defeated by 224 to 133. Mr. Villiers's annual motion was subsequently brought forward and lost by 323 to 124, but Mr. Bright predicted that either Sir Robert Peel would abolish the corn laws or his government would be overthrown. At a great meeting held in Covent Garden Theatre, Mr. Cobden announced that they would petition the existing House of Commons no more, but would memorialise the Queen direct in favour of the immediate dissolution of parliament.

Sir Robert Peel brought forward the Budget for 1845 on the 14th of February. There was a surplus of £3,409,000, which he proposed to devote to the reduction of the sugar duty, the abolition of the duty on glass, cotton, wool, and on the importation of Baltic staves. He also proposed to abolish the duty on all those articles which merely yielded nominal amounts, a step which would sweep away 430 articles from the tariff. The budget was not thorough enough for the friends of the league, who complained that it took away with one hand what it gave with the other. On the 7th of March Mr. Cobden moved for a select committee to inquire into the causes and extent of the existing agricultural distress, and into the effects of legislative protection upon the interests of landowners, tenant farmers, and farm labourers. The motion was lost by 213 to 121.

Early in May a great bazaar in connection with the league was held in Covent Garden Theatre. On the 26th of May, Lord John Russell brought forward eight resolutions in parliament in the hope of forcing on the question, and shortly afterwards Mr. Villiers repeated, for the last time, his annual motion for the abolition of the corn laws. On this occasion Mr. Bright said that Sir Robert Peel knew well enough what the country wanted, and he ought to do it, being the only statesman competent for the task. The premier brushed aside Lord John Russell's resolutions, and, in replying to the motion of Mr. Villiers, said that he could not see his way to apply the principle of free trade completely to agriculture and the total abolition of the corn laws. But there were signs of wavering and perplexity in the premier's mind. When the House rose on the 8th of August there were grave apprehensions as to the approaching harvest, and it was felt that the question of the continuance of the corn laws was mainly dependent upon the variations of the barometer. That which actually occurred was worse than the anticipation. The harvest was deficient in Great Britain, while in Ireland the potato crop, the staple sustenance of the population, failed entirely. Terrible suffering ensued, and at a mass meeting at Manchester on the 28th of October, Mr. Cobden called on Sir Robert Peel to save the country, which was menaced by famine. The cabinet met frequently, being much discomposed at the aspect of affairs; but even in this narrow circle there were strong differences of opinion as to the measures required. On the 22nd of November Lord John Russell issued a manifesto to the electors of the City of London declaring for the abolition of the corn laws. "Let us unite," wrote his lordship, "to put an end to a system which has been proved to be the blight of commerce, the bane of agriculture, the source of bitter divisions among classes, the cause of penury, fever, mortality, and crime among the people." This address precipitated matters, and it was followed by similar declarations from Lord Morpeth at Leeds, and Mr. (afterwards Lord) Macaulay at Edinburgh. The cabinet met on 25th November, and the crisis was now felt to be most urgent. The ministerial discussions lasted for several days. At length the Duke of Wellington gave way, and on the 3rd of December the *Times* made the startling announcement—received in many quarters with incredulity—that the abolition of the corn laws had been resolved upon, and that parliament was to meet at once to consider the question. As Lord Stanley, however, and some other ministers absolutely declined to support complete abolition, the premier resigned. Lord John Russell endeavoured to form a government, but his negotiations fell through, and Peel was recalled. Foreseeing that he could carry aboli-

tion through the combined efforts of his own friends and the whigs and free-traders, he consented to resume office, and Lord Stanley was replaced in the government by Mr. Gladstone.

Meanwhile, the anti-corn law league did not relax its efforts. An important meeting was held at Manchester on 23rd December, when it was resolved to raise a fund of £250,000 for the purpose of promoting free-trade principles in the existing emergency. Upwards of £60,000 was subscribed in the room in an hour and a half—the largest sum ever subscribed in the same space of time for any cause. On the 27th of January 1846 Peel brought forward his measure for the abolition of the corn laws before a crowded House of Commons. Prolonged debates took place at each stage of the bill, but eventually, on the 16th of May, the third reading was carried by a majority of 98 in a house of 556. The list of 327 members who voted in favour of the bill included 104 conservatives, and 223 whigs and liberals; the minority of 229, with the exception of seven votes, was composed exclusively of conservatives. Partly through the arguments and influence of the Duke of Wellington, the House of Lords passed the second reading of the bill by a majority of 47 votes, and the measure became law on the 25th of June. On the same day the Peel ministry fell upon the Irish Coercion Bill. The premier, in his speech on leaving office, delivered on the 29th, reviewed the course and policy of his government, paid a warm tribute to Mr. Cobden, and closed with these memorable words—"It may be that I shall leave a name sometimes remembered with expressions of goodwill in the abodes of those whose lot it is to labour, and to earn their daily bread by the sweat of their brow, when they shall recruit their exhausted strength with abundant and untaxed food, the sweeter because it is no longer leavened by a sense of injustice." The measure for abolishing the corn laws provided that from the passing of the act, and until the 1st of February 1849, the maximum duty would be 10s., exigible when the price was under 48s., and it was to fall a shilling with every shilling of rise in the price till the latter reached 53s. or upwards, when the duty was to remain at the minimum of 4s. The duties on barley and oats would undergo an alteration proportionally the same; while all grain from British colonies was to be admitted free of duty, and maize or Indian corn was to be admitted, immediately after the passing of the act, at a nominal duty. Other articles in the tariff, under the heads of articles of food, agriculture, manufacture, etc., were dealt with to the number of several hundreds, in the way of duties repealed or reduced. The duty on corn was to cease in 1849, with the exception of a registration duty of 1s. a quarter, abolished in 1869. This was resumed for one year, 1902-1903.

The Anti-Corn Law League was dissolved on the 2nd of July 1846, its work having been practically accomplished. It had a temporary revival, however, in 1852, when there was some fear that the brief administration of Lord Derby would return to a protectionist policy. After the abolition of the corn laws other restrictions upon the freedom of trade were gradually removed. The navigation laws were repealed in 1849, and in 1853 Mr. Gladstone greatly relieved the tariff by the reduction or total remission of imposts on 133 articles. Further steps in abolishing protective impediments were taken in 1860, 1869, 1874, etc. The policy of free trade in the United Kingdom has been justified by its effects on the prosperity of the country; for just as the free-trade system has enabled us to take the utmost possible advantage of periods of prosperity, so it has enabled us to meet phases of reaction and adversity with less strain on our resources than any of the protected countries. The British tariff is now virtually one for revenue only, and under this system we have secured a great expansion of both home and foreign trade. As the tendency of all our recent financial legislation has been towards the general abolition and diminution of duties in order to liberate trade, our commerce has shown in consequence a remarkable elasticity and power of recuperation in depression. (See MANCHESTER SCHOOL.)

[*History of the Anti-Corn Law League*, by Archibald Prentice, 2 vols. 1853.—*Free Trade and Protection*, by Henry Fawcett, 1878.—*Free Trade v. Fair Trade*, by Sir Thomas H. Farrer, 1885.—*Life of Richard Cobden*, by John Morley, 2 vols. 1881.—*Life and Speeches of John Bright*, by G. Barnett Smith, 2 vols. 1881.—*History of the Free Trade Movement in England*, by Augustus Mongredien, 1881.] G. B. S.

FREGIER, A. (1789; died soon after 1850), an official of the prefecture of the department of the Seine, was from 1824 to 1830 secretary of the *Conseil de Préfecture*, and from 1830 to 1843 head of the *Bureau du Domaine* (state property) in Paris. He wrote principally on subjects connected with the dangerous classes in large towns:—*Des Classes Dangereuses dans les grandes Villes* (Paris, 2 vols. 1839-40), and *Histoire de l'Administration de la Police à Paris depuis Philippe Auguste* (Paris, 2 vols. 1850). His pamphlet, *Solution Nouvelle du Problème de la Misère* (Paris, 1851), is in favour of a minimum rate of wages, to be fixed by the local authorities according to the cost of food and lodgings, coupled with an interdiction of employing married women in factories (p. 37), and of erecting new factories in large towns (p. 44). These rules were only to be applied to manufacturers employing more than twenty workmen. E. ca.

FREIGHT is the reward paid by the owner of goods to the shipowner for the service of

transporting merchandise from the agreed place of shipment to the agreed place of delivery. It accrues usually under written contracts called charter-parties or bills of lading. When an entire ship is hired for service a charter-party is made. When a part cargo is laden in what is called a "liner," a "berth" ship, or sometimes, a "general cargo" ship, no charter-party is made between the owner of the goods and the shipowner, but a bill of lading is issued to each shipper for his own parcel of goods, and the cost of freight as well as all the other conditions of the contract are set forth therein. In the latter class of cases freight is generally prepaid, the payment being made in exchange for the bill of lading. In the former class—where a charter-party is drawn up, and the whole ship is hired, the method of payment varies very much. Sometimes the freight is paid partly in advance at the time of shipment, but most frequently it is paid at the time and place of delivery. If in either case the goods are not delivered at the agreed port of destination, and the freight has not been paid in advance, no freight becomes due, no matter what portion of the voyage may have been accomplished. By the laws of some Continental States what is called "distance freight" is due to the ship when an accident prevents the vessel carrying the goods to the agreed destination, except in the case of total loss; but English law does not recognise any freight to be due which the charter-party makes payable at the port of destination on due delivery of the goods until the goods are so delivered. In the absence, however, of express stipulation to the contrary, freight, once prepaid in accordance with the terms of either charter-party or bill of lading, is not recoverable from the shipowner if, through the occurrence of some sea peril, the vessel fails to make delivery at the port of destination. The theory in this case is, that such prepayment of freight is added to the value of the goods shipped, and that the insurable interest in the amount prepaid vests in the owner of the goods, the value of which is enhanced by this prepayment. The shipowner has not always an insurable interest in prepaid freight. It is not at sea-risk, from the fact that it is paid. The shipowner has it, and no sea peril makes him liable to return the money if the goods are not delivered. The incidents of freight no longer attach to the money so paid.

The word "freight" covers a good many variations, such as chartered freight, bill-of-lading freight, owners' freight, charterers' freight, lump-sum freight, and dead freight, indicating various contract relations to the thing itself. Lump-sum freight means an agreed amount for a voyage, irrespective of the number of tons delivered, so that, unless otherwise provided, the lump sum is payable at destina-

tion, even although part of the cargo may have been lost from sea perils during the voyage. 'Dead freight is money due to the shipowner in respect of goods agreed to be shipped but not shipped by the person who has failed to make the shipment according to his contract to do so. It may also be observed that the word freight has a more exclusive significance between the shipowner and an underwriter in a policy of insurance than it has between the shipowner and the owner of the goods under charter-parties and bills of lading.

When freight is payable on right delivery at the agreed port of destination, the shipowner is entitled to payment even if the goods are delivered damaged, but the shipowner incurs liability for the value of non-delivered goods stated by bill of lading to have been shipped, or for which a receipt has been given; a claim against the shipowner for damaged goods also holds good where fault or negligence is proved. Shipowners contract themselves out of liability to pay for damaged goods in certain specified cases, and if the goods arrive in specie freight is always payable.

Many disputes occur as to where freight is payable. It has been held that the captain should deliver the goods first and claim payment afterwards. This, however, conflicts with two important conditions. The first results from the common-law dictum, which gives the carrier a lien for freight on the goods he carries. Obviously, his lien lasts so long as the goods are in his custody, and cannot be exercised after they have passed into the premises or possession of the person by whom the freight is payable. To be available against him, payment before getting possession is essential. The second results from a condition now frequently inserted in charter-parties, by which the charterer stipulates that after the cargo is once shipped his liability under the contract shall absolutely cease, and that the shipowner shall look to, in other words, exercise his lien on, the cargo to secure payment of the agreed freight; so that if he fails to do so, and, from any cause cannot, after delivery, get the freight from the receiver of the goods, he shall have no right to come back on the original charterer and enforce payment against him under the charter. In business language this is called the "cesser-clause." The shipowner, therefore, has lien both by common law and by special contract, and, in consideration of the latter, generally gives specific release from liability to the original charterer, after he has once shipped the cargo on which the shipowner's lien for freight is to accrue. In consequence of these two conditions it has been held that the master should deliver and the consignee receive the goods at the ship's side, and that on such delivery the master ceases to be responsible for the goods, and to have any

lien, so that he is justified in refusing to proceed with the delivery unless the freight is paid. These considerations secure that delivery and freight payment are, as nearly as possible, coincident, and have the effect of preventing shipowners from making bad debts on the one hand, and, on the other, of saving charterers from paying freight twice over, both being equally objectionable. In practice they work easily although this description makes them look rather elaborate.

Freight has become, in recent years, an object of greatly increased interest to the inhabitants of the United Kingdom. Three-quarters of a century ago we could generally feed ourselves by our own productions. Since then the population has increased more than 50 per cent. And the economic condition of the larger population is so much improved that the scale of consumption is much larger than in former times. Less than half the commodities consumed now are produced here, and it is certain that of our daily bread, less than a fourth part is grown at home. The carriage of these vast supplies of food, in addition to the raw materials for our manufactures, makes the question of freight of interest to every inhabitant of the kingdom. Our food cannot come here without sea-carriage; this cannot be provided without the payment of adequate freights. It is, therefore, matter of common interest to inquire—what must freight cover? what items do really enter into its cost? and what has the payment called freight to provide?

In the first place, freight has to provide for the building, maintenance, depreciation, and ultimate loss of the ship itself. If freight were not adequate for all these purposes, sea-carrying would not be continued as a trade. No capitalist would invest money in the building or buying of ships unless he expected on the ultimate loss or sale of the vessel to find his original capital in hand, plus something more than 3 per cent interest for the time of the investment, otherwise the money had better have been put into consols or railway debentures. No one invests in very troublesome and precarious trades but for the hope that at the end of the adventure they would find not the capital only, but interest at a higher rate than that yielded by investments which give no trouble, and are practically without risk.

In the second place, a ship is only a tool; a tool moreover which demands the constant employment of labour for its use. It must be prepared and outfitted for every voyage. To the outfit of stores and provisions nearly every trade makes contributions. To load cargo, docks and harbours are necessary; their cost must largely be provided out of freight. Captains, mates, engineers, firemen, and seamen, all must be paid wages, and fed while at

sea. The light and pilotage services round our coasts are also paid for out of freight, these being special charges on shipping. When the vessel comes back with her cargo, the same charges have all to be paid again. Freight, therefore, may be said in one sense to be a very large employer of labour. Large classes of labourers on shore, as well as the seamen afloat, live out of it, and freight must be sufficient to bear the cost of all these charges.

The student of economic facts will be prepared to hear that great changes have taken place with regard to all these elements in the cost of freight in late years. Ships were formerly built of wood, then of iron, now almost exclusively of steel. Steam propulsion, excepting in the very long trade voyages, is rapidly superseding the use of sails. To build wooden ships we had to depend on imported timber. For iron and steel ships, the raw material in vast quantities lies under our feet in the iron and coal measures, a percentage only of iron in the ore or plates being imported. The cost of shipbuilding is less than formerly. That of maintenance is about the same. That of structural depreciation is not less. It used to be thought that iron structures would last indefinitely. But the vicissitudes of climate and other things have modified this opinion. Since the early years of steam changes in requirements of size, type, and speed have rendered many vessels useless, in an economic sense, long before they were worn out. To cover the risk of becoming obsolete, inevitable outlays on surveys, on new boilers in the case of steamships, and depreciation between old and new, about 10 per cent of the original cost must be set aside annually to secure replacement of capital with reasonable interest. This, of course, must be borne by freight. Since the introduction of triple expansion engines about 1885, no improvement of the first importance has been made in steam, and it may be assumed that, excluding the possible advent of some invention as far reaching in its effects as triple expansion, a depreciation of 4 per cent to 5 per cent is now sufficient.

It is probable that the costs of navigation have decreased. Wages are higher both for seamen and on shore; but so much steam is used to economise labour, that in spite of higher pay to the men actually employed, it is probable that this item in the cost of freight is less than formerly. Insurance is probably cheaper, in most cases it certainly is so.

None of these items, however, are so changed as to explain the largely reduced cost of freight. Limiting our view to the last forty years, which mark the time within which steam began to be used for ordinary cargo-carrying, the reduction is very large. It is difficult to state it in figures. The short-voyage trades necessarily show the least reduction, because freight on these

includes the labour of loading and unloading, of light and harbour dues, etc., so frequently; and these items are higher than formerly. But in the long-voyage trades reductions to below a third of the former rates of freight are quite common. If the comparison be extended to sixty or seventy years ago, many freights would be found at less than one-fourth what they were then. They still fluctuate much, with variations in crops and seasons, and are affected sometimes by wars and famines; but apart altogether from such exceptional causes, the permanent level of freight is lower in the proportion stated. Two causes have led to this: (1) The shortened time of voyages by the use of steam. Coasting voyages which frequently occupied a month now occupy less than a week. Mediterranean voyages that used to occupy five or six months are now completed in two. Indian voyages, *via* the Cape, by sailing ships, which frequently occupied ten, eleven, and twelve months, are now frequently performed by cargo steamers in three, and seldom exceed four months. (2) The greatly increased size of the vessels. Cargoes of 4000 tons are as common now as those of 1000 tons before the use of steam; and cargoes of 5000 to 7000 tons are becoming frequent. These larger bulks can be carried at greatly reduced rates. The large steam vessels of to-day can make profits out of rates of freight on which either the small steamships or the large sailing ships of former times would have made large losses. These two are the chief factors in this great reduction in the cost of freight. Steam has saved time, and the growth of business has made it economically possible to carry in larger bulks.

We have recently been passing through a remarkable revolution in all that related to freight. The material of the vessels, the method of propulsion, the speed, the size, have all changed, and all have conduced to the reduction in the cost of freight already mentioned.

The economic effects of this change are very considerable already, but are probably more far-reaching than anything apparent yet. Men used to live where their food was grown, and were limited in their numbers to the local means of subsistence. Cheapened freight has made maritime distance of very small account so that millions of human beings in these islands are living thousands of miles away from the localities in which their daily bread is grown, without any sense of risk or insecurity. Indeed, they are better off than their fathers, who had to live on what was locally grown, whether it was a bad crop or a good one; but now, if the local crop is either bad or short, it makes very little difference in the price though a great difference to the grower, so cheap and good and constant is the over-sea supply. Cheapened freight, therefore, may be said to have modified

the operation of the Malthusian law in an important degree, for the time at all events, by bringing the surplus food production of the most distant countries to our markets, at constantly decreasing prices, 42,000 000 of people in these islands, being now fed with far cheaper, and generally better bread, than half the number formerly.

This would be an important matter if it affected our own state only. But other states are following in our steps, and in spite of duties more or less prohibitory, find it impossible to keep out of their ports the cheaply produced grain of distant lands, carried by English steamers at little more than nominal freight. There is no record of these transactions between foreign states in our board of trade and navigation returns; but the quantities of food carried under our flag to Germany, Holland, France, Belgium, Norway, Sweden, Spain, and Italy are very large indeed. When the sea freight has come to be less in many cases than the cost of inland transport from one part to another part of the same kingdom, it is easy to see how large coast populations begin to draw on the over-sea supplies, which are found cheaper than the home-grown food.

Whether such a state of affairs will last it is impossible to say. Will men go to live where the food is grown? or will they continue to depend on cheap freight for bringing the treasures of other climes to consumers here. This is a new state of things, and one of the very remarkable effects of cheap ocean carriage.

It is only necessary to allude to one other fact connected with freight. Though so much cheaper than in earlier years, the transactions are so large as to have furnished economists with one of the chief factors in making up the difference between the apparent value of our imports and exports. Twenty years ago there was much concern at the growing gulf between these two values. We were reminded of the dividends the United Kingdom had to receive from abroad as partly explaining the difference, but they were not an adequate explanation. All further anxiety on the matter was disposed of when it was shown that the import value included the freight, and had to be reduced by the amount thereof, also that the export value, in most cases, also required that the freight should be added, because both freights were earned so largely by the English flag, *i.e.* by Englishmen working in English ships, and constituted as real an export value as any other item of export that appeared in the trade returns. It was happily called "an invisible export," the value of which being duly deducted from imports and added to exports, explained the manner in which the apparent excess of imports was paid for.

J. G.

FREIGHT, DEAD, and other terms. See FREIGHT.

FREIGHT IS THE MOTHER OF WAGES.

This maxim, which means that unless a ship earns freight the sailors are not entitled to wages, has ceased to be applicable in the United Kingdom since 1854, by the Merchant Shipping Act of that year, providing by § 183 that "no right to wages shall be dependent on the earning of freight," subject, however, to the reservation that a sailor's claim is to be barred if it can be proved "that he has not exerted himself to the utmost to save the ship, cargo, and stores." Any attempted modification of this provision by private agreement is wholly inoperative (see § 182). Previously to the statutory abrogation of the old rule, the Courts had already engrafted many exceptions on it, and it was never applied to the master of a ship (see *Hawkins v. Twizell*, 25 Law Journal (Q. B.) 160); but it seems strange that a rule so inhuman and unjust should have been allowed to remain law for such a long period.

According to French and Italian law a sailor was not entitled to wages in case of capture or total loss of the ship and goods (*Code de Commerce*, § 258 [unamended]; *Codice di Commercio*, § 235), but as regards France this rule was, in 1885, altered in favour of the sailors; and in the case of loss of freight for other reasons, the codes of both countries always upheld the sailors' claims in the absence of express stipulations to the contrary.

According to German law, a sailor belonging to a ship which has been lost is entitled, not only to the wages earned up to the date of the loss, but also to the expenses incurred in returning to the port from which the vessel started on its voyage.

[As to the present state of English law on the subject, see MacLachlan, *Law of Merchant Shipping*, 4th ed. 1892. — Abbott, *Law of Merchant Ships and Seamen*, 14th ed., 1901 (see also the report of *Cutter v. Powell* in Smith's *Leading Cases*).]

E. S.

FRENCH SCHOOL OF POLITICAL ECONOMY.

Period I., p. 154; Period II., p. 156; Period III., p. 157; Period IV., p. 158.

A survey of the French school, from its commencement to the present time, will show that it has passed through four successive phases, which are clearly marked off one from the other, and form the natural subdivisions of this article.

PERIOD I. (1615-1808).

During this first period, which may be termed the period of the foundation of economic science, France may assuredly be said to have taken a more important part than any other country. With the increasing interest felt by economists in the history of economic doctrines, and with the greater amount of study they bestow upon the older authors, more and more ample justice is paid by them to the great ser-

VICES rendered in the past by the French school. It might be said that nowhere else has political economy had a larger number of precursors.

It is now generally agreed that it was in France that political economy first saw the light and even received its name; for the first book bearing the title of *Économie Politique* is that by Antoine de MONTCHRETIEN, *Traité d'Économie politique*, 1615. (This fact is specially admitted by Cossa, on page 61 of his *Introduction to the study of Political Economy*, English translation). Unfortunately the title of Montchretien's book is practically the only portion that has deserved to survive, but that was certainly a beginning. What, however, may be held to be the first systematic treatise on political economy is the *Essai sur la Nature du Commerce*, by Richard CANTILLON, which, although not published till 1755, was obviously written before 1734, since that was the year of his death. In this work nearly all the subject-matter of modern political economy is dealt with in a most clear and definite manner. A new edition has just appeared, with a preface by Mr. Higgs, who, in the *Quarterly Journal of Economics* (July 1892), writes that "good reasons might be given for regarding him as the father of political economy without putting any strained interpretation upon the phrase."

Questions concerning money and taxation greatly attracted the attention of the early French economists, probably by way of reaction against the debasement of the coinage habitually practised by the kings of France, and against the unjust privileges in respect to taxation which characterised the old régime. Thus, long antecedent to Antoine de Montchretien, deep in the middle ages, just half way through the 14th century, Nicolas ORESME, bishop of Lisieux, the tutor of Charles V., wrote a treatise entitled *Tractatus de Origine, Natura, Jure, et Mutationibus Monetarum*, of which Professor Ingram has been able to say that it "contains a theory of money which is almost entirely correct according to the views of the 19th century" (Ingram, *History of Political Economy*, p. 36). In this Bishop Oresme protests boldly against the alterations in the value of money made by the king—these he terms a "fraudulent act" (*actio fraudulenta*). In the same way two centuries later, during the time of the serious rise in prices which characterised this epoch, BODIN was the first to give the scientific explanation of the causes which led to this, in a memorandum written in 1568, showing that the enormous importation of gold and silver in Europe depreciated the value both of the precious metals and of the money. Finally BOISGUILBERT, in the *Détail de la France* (1692), made this bold statement respecting money: "It is very certain that money is not a value in itself, and that its quantity adds nothing to the wealth of a

country." With regard to taxation, those writers whom we have just mentioned, Bodin and Boisguilbert, both insisted that taxation should be proportional, and that the exemptions in favour of the nobility and clergy should be suppressed. We must join with these the illustrious Marshal VAUBAN, who in *La Dime Royale* (1707) proposed the abolition of all the existing taxes, and the replacing them by one single tax "charged proportionally on all who possessed an income." In writing on these subjects Vauban was the first to employ statistical documents; these had been collected by himself, and are almost the only ones we possess referring to that epoch.

A short time before the date of the PHYSIOCRATS, a man who is perhaps best known to us by the encomium pronounced by TURGOT on him, Vincent de GOURNAY (who died in 1759), drew up the programme of the "liberal school." To him also has been attributed that famous saying *laissez-faire, laissez-passer*. Whether this is true or false, it is certain that it was he who promulgated the view that, since private interests concurred with public interests, the best thing, from the point of view of the advantage of the public, was to let every one follow his own way in life.

Full justice, too, is nowadays awarded to the genius of QUESNAY and to the merits of his disciples MERCIER DE LA RIVIERE; DUPONT DE NEMOURS; LE TRÔNSE; TURGOT (see all these), that illustrious body of men who first bore the name of ECONOMISTES, and were in the main much in advance of their time. Universal tribute is paid to their praiseworthy endeavours to form a vast synthesis of economic facts, and to their skill in deducing from a few principles a large concourse of individual items of knowledge, the very characteristic of the formation of a new science. Although they did much to make plain the notion of wealth, still it was not "wealth" but the "natural order of society" that they regarded as the subject of the new science; perhaps, indeed, their conception was more correct than that of ADAM SMITH. There is no need here to analyse the physiocratic system, for that will be treated of in a special article in this Dictionary. All that is required here is to assign to the physiocrats their place in the history of the French schools (see EPHEMERIDES; PHYSIOCRATS).

Great indeed was their influence over Europe; every one knows their relations with the Margrave of Baden (whose correspondence with MIRABEAU and Dupont has lately been published) (see KARL FRIEDRICH); with Leopold, Grand Duke of Tuscany, afterwards Emperor of Austria; with Gustavus III. of Sweden; with Stanislaus, King of Poland; and even with the Empress Catherine of Russia. Moreover, these relations were not purely literary, but also had

a beneficial influence over the laws of the countries above mentioned. In France, their influence on legislation might have been expected to have been even greater, seeing that one of the most illustrious of their number, Turgot, was minister of state. As a matter of fact, in his edicts with regard to the abolition of the restrictions on the movement of grain, of the exclusive trade corporations and of forced labour, Turgot did not fail to apply in all their integrity the principles of the physiocrats. However, most of these reforms came to nothing—perhaps because he applied these principles too hastily, or as a philosopher rather than as a statesman; or because the resistance to them was too powerful for the weak hands of Louis XVI. to overcome.

The Catholic school has bitterly reproached the physiocrats for having by their teaching prepared the way for the French Revolution; it might be more correct to say that had these doctrines been applied, there would have been no necessity for the revolution. The influence of the physiocrats has been less powerful in the sphere of science than in the region of legislation, partly because the glory of Adam Smith caused them to be forgotten, partly because even in France their successors have treated them with excessive disdain. But their influence over Adam Smith, and through him, indirectly, upon the general evolution of the science, cannot be gainsaid, though even now not sufficient light has been thrown upon it. The classical school, at its first introduction, encountered two important opponents—both heretics in the opinion of those who held to the doctrines of the school—the first one, FORBONNAIS (*Principes Économiques*, 1767), who defended the protectionist system, the other the philosopher CONDILLAC, who in his book on *Le Commerce et le Gouvernement* (1770) criticised several of the doctrines of the physiocrats, notably that on value, as to which he develops for the first time a psychological theory closely approaching the one so celebrated at the present day under the name of the theory of "FINAL UTILITY."

A place amongst the founders of political economy must be reserved for Jean Baptiste SAY, not indeed on account of the originality or depth of his ideas, but simply because he was the author of the first really popular work on political economy. His *Traité d'Économie politique* (1803), which was wonderfully well arranged and lucid, was translated into many languages, and thus made the new science accessible to all classes of society. Nor was he simply a mere populariser; he gave economic science its present form and its definitions;—from his categories, his vocabulary (e.g. the term "ENTREPRENEUR," which has been borrowed by most other languages), and his great divisions of the science, has been con-

structed the scale it was henceforward to work by. The classifications which he planned, the impress he stamped on the science has been reproduced in every text-book published during this century.

PERIOD II. (1803-1848).

In this second period the series of economists received a strange interruption. During more than forty years economic science in France underwent an almost total eclipse. From Jean Baptiste Say's work (1803), which we have just referred to, up to DUNOYER's publication (in 1845) of his book on *La Liberté du Travail*, no economist can be mentioned who created a school. No doubt there were several works of some merit, but they dealt rather with subjects bordering on political economy than with the science itself. Amongst these are the treatises of DESTUTT DE TRACY (1823) and of Joseph DROZ (1829), which were strictly speaking the writings of a philosopher and a moralist; the *Systèmes de Culture* of Hippolyte PASSY (1846), which treated of rural economy; COURNOT's even more important work, *Recherches sur les principes mathématiques de la théorie des richesses* (1838), which is an early instance of the application of mathematics to political economy,¹ and VILLERME's *Tableau de l'état physique et moral des ouvriers* (1840); this last is an excellent statistical study. There was a sudden break in the series of great didactic works, while contemporaneously it continued in England. No account can be taken here of STORCH (*Cours d'Économie politique*, 1815, and *Considérations sur la nature du revenu national*, 1824), since his work lay outside France; of ROSSI (*Cours d'Économie politique*, 1840), since he was an Italian; or of SISMONDI (*Nouveaux principes d'économie politique*, 1819), since he was a Swiss; indeed the latter could in no case be counted as an economist of the classical school, inasmuch as he was their vigorous opponent.

In truth, if the classical economists disappeared from sight in the period now under review, the reason was that they were replaced by their foes, the socialists. The period is filled with the names of SAINT-SIMON, FOURIER, PROUDHON, LOUIS BLANC, and of such writers, less known than they deserve, as BAZARD, ENFANTIN, LEROUX, BUCHEZ, VIDAL, and CABET. These men attracted general attention and drew the thoughts of all men towards them. It is the fashion nowadays, especially with

¹ Cournot "taught that it is necessary to face the difficulty of regarding the various elements of an economic problem—not as determining one another in a chain of causation, A determining B, B determining C, and so on—but as all mutually determining one another. Nature's action is complex, and nothing is gained in the long run by pretending that it is simple, and trying to describe it in a series of elementary propositions."

[Marshall, *Principles of Economics*, vol. i., in his preface to the first edition bears a high tribute to the ability of Cournot. . . "Cournot's genius must give a new mental activity to everyone who passes through his hands," p. xv. Macmillan, 2nd ed., 1891.]

socialists of the German school, notwithstanding their obligations to it, to turn this socialism, which they term "utopian," into ridicule. But in my opinion, when the history of socialism and of its first beginnings receives the same amount of attention as the history and origins of political economy have received, the French school will be found to have taken, in the creation of contemporary socialism, a share equal, or even superior, to that which it had in the formation of economic science. No doubt there was much that was utopian in the exuberant blossoming of ideas that characterised this period; but many of them have borne fruit and have taken their place in what is now called scientific socialism. The notion that man, as a member of society, has functions to fulfil rather than rights to exercise (in direct opposition to the revolutionary programme of the "Rights of Man"), forms the basis of the teachings of Saint-Simon. In the writings of his follower, Bazard (*Doctrine de Saint-Simon*, 1828-29), there is a perfectly clear exposition both of the social question of the present day, i.e. the separation of the labourer from the instruments of his labour, and of the solution proposed by the collectivist school, i.e. the nationalisation of the instruments of production. Again, never have the advantages of co-operative association for purposes of consumption been analysed with more precision, and never have the disadvantages of the increase of "middlemen" been more vigorously assailed, than in the works of Fourier (*Association Domestique Agricole*, 1822). The theory of the "Iron Law" (*loi d'airain*), and the proposition destined to become so terrible a weapon in the hands of the Marxists, namely, that wealth is the product of the labour of others, are plainly set forth in Vidal's *Répartition des Richesses* (1846). In 1831, twelve years before the Rochdale Pioneers, Buchez founded the first co-operative society for production, as a means of social transformation, and suggested as the aim of the working classes that system of *collective saving* in the shape of a reserve fund, in preference to the method of individual saving, which is the characteristic feature of trades unions. Of the unreadable writings of Leroux but one word survives; yet it, the term *solidarity*, shines out as a guiding star. Proudhon's confused and vehement reasonings (*Qu'est-ce que la Propriété?* 1840; — *Système des Contradictions Économiques ou Philosophie de la Misère*, 1848) have been, perhaps, of little special value to the doctrine of socialism; but they have rendered a very real service to economic science by obliging it to examine and to consolidate the foundations of political economy, which till then had been regarded as unshakable. The *Système*, however, is memorable as having called forth Karl Marx's taunting reply *La Misère de la Philosophie*.

Auguste COMTE, also, should not be counted as a socialist, but at any rate he must be placed amongst the opponents of the economists; they have never forgiven him for the contempt he poured on them and for his assertion of the absolute uselessness and irrationality of endeavouring to make political economy an independent science. Perhaps Mr. Ingram goes a little too far in saying that Comte, the founder of sociology, was also the founder of the historical school of political economy.

Never has France, and Paris in particular, shone more brightly in the world, or exerted more influence over the socialistic movement, than in the period which ended in the Revolution of 1848, an event, indeed, that nearly set all Europe in a blaze. That influence spread on the one side to America, where communities were founded after the fashion of Fourier's phalanstery, and in the other direction to Russia, exiles from which country, the future chiefs of anarchism (e.g. Herzen and BAKOUNINE), came to Paris for instruction.

PERIOD III. (1848-1878).

This third period is in striking contrast to its predecessor. The socialists vanish from the scene and are not again spoken of; never before has any school of thought seemed smitten by so sudden a death. The following passage occurred in the article on the "Socialists" in the *Dictionnaire d'Économie politique* which appeared in 1853: "When we state that socialism, at any rate in its recent shape, is altogether extinguished, there is no fear of our assertion being falsified either by the course of time or by future events." A sufficient explanation of the phenomenon lies in the failure of the revolution of 1848 and its replacement by the second empire.

On the other hand, the classical school of economists, who had never been heard of during the second period, sprang up on every side. This fresh movement had already been begun by Charles Dunoyer's book in 1845, but the liberal and optimistic traditions of the French school were first renewed, with remarkable energy, by Frédéric BASTIAT in his *Harmonies Économiques*, published in 1850, the year of his death. The final triumph of the orthodox and liberal school was effected by many authors. Mention may be made of the numerous writings of M. Michel CHEVALIER, the series of which had commenced in the preceding period with his *Cours d'Économie politique* (1842-1844), and comprised *La Monnaie* (1850), *Le Système protecteur* (1853), and *La Baisse probable de l'Or* (1859). In 1852 and 1853, MM. Coquelin and Garnier issued the *Dictionnaire d'Économie politique*; in 1855 came M. de Molinari's *Cours d'Économie politique*; in 1857 M. Baudrillart's *Manuel*; in 1858 M. Courcelle Seneuil's *Traité d'Économie politique*; in 1861 M. Frédéric

Passy's *Leçons d'Économie politique*; and in 1867 M. Levasseur's *Précis d'Économie politique*. Indeed, all those liberal ideas which had been proscribed by Napoleon III. appear to have taken refuge in political economy, and to have breathed into it a new life.

The opinions of the economists of this period do not differ materially from the tenets of the "MANCHESTER SCHOOL," i.e. free trade, distrust of state interference, and monometallism. However, Stanley JEVONS observes that the French school is less dogmatic in its ways than the English school, and with reference to "the doctrine of wages," for example, he observes, that the true doctrine may be more or less clearly traced through the writings of a succession of great French economists, from Condillac, Baudeau, and Le Trôgne, through J. B. Say, Destutt de Tracy, Storch, and others, down to Bastiat and Courcelle-Seneuil. "The truth is with the French school."

Indeed, in the hands of the French school political economy becomes a natural rather than a deductive science. In spite of their disinclination to acknowledge their debt, French economists have remained faithful to the traditions left them by the physiocrats. They frequently take a delight in contrasting the generous and idealistic spirit of their school with the egoism and mercantile tendency of the English school. Perhaps this contrast is less real than they suppose it to be. As a matter of fact their egoism is as great as that of the Manchester school, the difference being that their temperament is light-hearted, whereas that of the English economists may be regarded as sombre; in short, the latter are pessimists, the former are optimists. OPTIMISM, indeed, has been the characteristic feature of the French school ever since the days of the physiocrats even to our own time; the fullest expression of this is found in Bastiat. It may be defined as a belief in a natural order which regulates human society, and, though not exempt from certain disorders, is still, human nature being as it is, the best possible. Moreover, this natural order of things is capable of indefinite improvement through the unfettered action of liberty and of competition. Beyond this lies the conviction that no attempt to modify the machinery of the system should be made, and that all that is necessary is the removal of the obstacles that might impede its due working.

And if this school in a general way rejects the English theories respecting rent, wages, and population, this arises from the idea (*idée a priori*) that the discouraging consequences of these theories enhance the difficulty of the justification of the existing social order.

During this period there were but two dissentient economists. The first of these, WOLOWSKI, indeed, separated himself from the school only on a question of detail, i.e. bimetallicism,

which he warmly advocated in his *Liberté des Banques* (1864), and in his *L'or et l'argent* (1870). The other was LE PLAY, who wrote *Ouvriers Européens* (1855), and *La Réforme Sociale* (1864), and founded a school,—the first, indeed, to branch off from the parent stock. Still, Le Play, and his followers in a marked degree, continued to adhere to the liberal school in their distrust of state interference, and in their apologies for the "essential principles" of our present social organisation, including competition. Le Play, however, abandons the optimistic standpoint and the deductive method; he desires a "reform," and strives to find the elements of such a reform in the observation of facts, especially in the study of the family life of the working classes.

During this period the influence of the economists was so great that it could not fail to penetrate into the sphere of legislation. It is well known that Michel Chevalier negotiated, together with CORBEN, the famous treaty of commerce of 1860 between France and England, which inaugurated an era of modified free trade not only for France but also for the rest of Europe.

Protection was believed to be as completely stamped out as socialism. The conviction of this double victory contributed largely to the maintenance of the proud self-confidence of the orthodox school. Credit may also be given them for the law of 1864, which abolished the penalties attaching to the right of combination between workmen. In accordance with their principles the economists had always admitted that combination was "the natural, regular, and legitimate means of resistance afforded to the working classes by the system of free competition" (*Dictionnaire d'Économie politique, sub voce* "Coalition"). They had also no small share in the development of the French railway system (the conventions of 1859) and of joint-stock companies (the Act of 1867), and in the formation of the great international exhibitions of 1855 and 1867, in which important parts were played by Michel Chevalier and Le Play. Further, Le Play endeavoured to procure the enactment of a measure granting freedom of disposition of property by will, at least up to a certain point; but in spite of the support of Napoleon III., the bill failed to pass through the Chamber, for it was in too flagrant contradiction with the "principles of '89."

In this period the liberal French school reached its apogee, but it was also approaching the commencement of its decline, or at any rate, the end of its uncontested supremacy. The conflict between the liberal school and its rivals occupies the fourth and last period, on which we are about to enter.

PERIOD IV. (1878-1892).

The date from which this last period should

be reckoned is necessarily to some extent undetermined; the year 1878 has been chosen, since it marks an important event that we shall presently discuss, that is to say, the rupture between university education and the orthodox school.

During the time we are now considering, most of the leading economists of the preceding period still bore on high the banner of the liberal school, MM. de Molinari, Frédéric Passy, and Levasseur. Michel Chevalier, Baudrillard, and Courcelle-Seneuil have gone, but their places have been filled by MM. Leroy-Beaulieu, Block, Léon Say, and De Foville, and taking all in all, the liberal school contains as many men of high ability as ever it did. This school is in exclusive occupation of the benches of the Institute and of the professorial chairs at the various schools of Paris. The venerable *Journal des Économistes* has received as companions the *Économiste français* (1873), edited by M. Paul Leroy-Beaulieu, and the *Monde Économique* (1891), edited by M. Beauregard, Professor in the Faculty of Law at Paris; both of these organs uphold the same cause. A new *Dictionnaire d'Économie politique* (1890-1892) has appeared under the care of MM. Léon Say and Chailley; it is written in the same spirit as the former one. To all outward appearance, therefore, things would seem to be as they were; but in reality there have been great changes. The liberal school has lost the public ear and the legislative support that it possessed in the preceding period. It is hated by the working classes, who upbraid it for its quietism; by the agriculturists and manufacturers, who have never forgiven it for free trade; by the Catholics, who regard it as the embodiment of the principles of the Revolution, and whom the very name of liberalism irritates; and, last of all, by the radicals, who are hastening on towards state socialism. From every side rival schools are rising, all of which are preparing for the conflict by starting their own "Reviews."

Le Play's school, which grew in importance after the disasters of 1870, formed groups in all parts of France termed *Unions de la Paix Sociale*, and in 1881 founded a fortnightly review, the *Réforme Sociale*, which abstains from all theoretical subjects, but is one of the best publications for the discussion of all questions relating to economic legislation. Its chief representative in France was M. Claudio JANNER, whose most important work is *Le Socialisme d'Etat et la Réforme Sociale*. M. Demolins, author of *A quoi tient la supériorité des Anglo-Saxons*, and editor of the review *La Science Sociale*, also claims to be a direct disciple of Le Play, though disowned by the main body of the school. For all this, Le Play's school is a rival rather than an enemy of the liberal school; indeed, it is almost as liberal, but its apologies are made less for things as they are than for things as they were.

But by the side of Le Play's followers another Roman Catholic school has risen, of a far more pronounced religious character, which is the representative of what we have now agreed to call Christian socialism, in spite of its energetic repudiation of the epithet "socialistic." It is very bitter, as vehement indeed as the socialists themselves, in its criticisms of the economic organisation of the present day, especially of *laissez-faire* and competition, and is much inclined to fall back upon the State, which it terms the "Minister of God." Its organ is *L'Association Catholique*, a monthly review that was founded in 1876, and its most eloquent spokesman is the Comte de Mun, a member of the Chamber of Deputies. Further information on the subject may be found in M. Urbain Guérin's *L'Évolution Sociale* (1891).

Again, a new lease of life had been taken by the socialist school after the termination of the Paris Commune of 1871, and around this revolution a great "socialist legend" grew up, its two chief apostles being Jules Guesde and Lafargue, Karl Marx's son-in-law, who were for some years members of the Chamber of Deputies. These two represent collectivism of the Marxist variety. M. Benoit MALON, the editor of the *Revue Socialiste* (started in 1885), author of a number of books, the chief of which is *Socialisme Intégral* (1890-1892), clings more closely to the traditions of the socialism of the French species, which is less materialistic, and holds that the matter of "filling one's belly" does not exhaust the whole social question, and has to-day for leader M. Jaurès of the Chamber of Deputies.

In 1878 the event occurred that I here referred to as the starting-point of a new period, namely, the institution, at all the universities in France, strictly speaking, in their faculties of law, of professorial chairs or lectureships of political economy, which duly appear on the official schedule of education and examination. Till then political economy had been taught only in the special schools at Paris, and at the Collège de France. Instruction in this subject was given entirely by a small number of economists, all of the same school, sometimes of the same family, and lecturing in the same city. Naturally, therefore, the teaching of political economy became a sort of monopoly and received that restricted and almost sectarian tendency which has thrown it into discredit. When in the year 1825 Jean Baptiste Say wrote in the preface to the *Traité d'Économie politique*—"Nowadays political economy is taught wherever knowledge is valued. It has already had professors in the universities of Germany, Scotland, and Italy";¹ little did he think that as far as regards French universities his

¹ In speaking of Scotland Say was thinking, no doubt, of Adam Smith, Dugald Stewart, etc. The "chair" of Edinburgh is of later date (established in 1871).

wish would take more than half a century to realise.

The new professors of political economy in the faculties of law did not all of them secede from the orthodox school; for instance, M. JOURDAN (who died in 1891) and M. Villey still adhered to the principles of the liberal school, but in some instances the rupture was immediate. This was especially the case with M. Cauwès, who lectured on political economy in the faculty of law at Paris, and who occasioned much commotion by the publication in this very year, 1878, of his *Cours d'Économie politique*. The cause of irritation lay in his avowing the same scepticism as De LAVELEYE with regard to natural laws, and his inculcation of LISR's theories on protection. In 1887 one of the new professors (Prof. Gide) took the lead in founding the *Revue d'Économie politique*, which received the support of all the professors in the various faculties of law, and of a large number of professors at foreign universities, particularly in Germany, who till then had received practically no hearing in France. The aim which the founders of this organ had in view was not exactly to form a new school, but merely, to use their own words, "to open out a neutral territory on which both doctrines and facts might be studied and compared with one another." As a matter of fact, they are being more and more drawn into the sphere of attraction of the historical school, and also of state socialism.

Further details on this last period may be found in the writer's article on "The Economic School in France," in the *Political Science Quarterly* (vol. v. No. 4).

Our survey would be incomplete if we failed to mention a large number of publications that propagated either socialistic ideas or protectionist principles; such notions are not confined to special organs, but are set forth in a whole host of political newspapers. To these might be added purely literary works, such as those of Zola, Cladel, and Rosny, which resemble the writings of George Sand and Eugène Sue half a century ago, in spreading socialistic ideas far and wide.

Naturally enough legislation has been affected by this change of front by the French school. The treaties of commerce which were negotiated between 1860 and 1870, under the auspices of the free trade school, have now been denounced by French lawgivers, and an exceedingly protectionist customs tariff has been imposed. Concurrently with this large numbers of bills, most clearly marked with state socialism, have been laid before parliament, sometimes by private members, sometimes by the government. One bill, which has become law, limits the hours of labour for children and women. Others purpose a great superannuation fund for workmen; to grant certain privileges to

workmen's syndicates, such as the dispensing of the giving of securities in competing for public works; other proposals forbid employers, under severe penalties, to dismiss any workman on the ground that he is a member of a union; to compel contractors for the execution of public works to introduce profit-sharing; another subjects the companies which work the coal mines to the rigorous supervision of delegates elected by workmen. The most recent school of socialism is that of *Solidarisme*, which seeks to hold the middle place between INDIVIDUALISM and COLLECTIVISM (see SOLIDARITY).

In this historical sketch of the French school we must not omit a reference to a special branch of political economy, in which this school has perhaps most successfully displayed its characteristic qualities—precision, order, and clearness, that is in treatises relating to finance and taxation. M. de Parieu's *Traité des Impôts* (1862) and M. Paul Leroy-Beaulieu's *Traité de la Science des Finances*; R. Stourm, *Le Budget*; Léon Say, *La Solution démocratique de la question des impôts*;—*Le Dictionnaire des Finances*; have deservedly attained the position of classical works throughout Europe. c. g.

FRENCH TREATY OF 1860. See COMMERCIAL TREATIES.

FRICTION IN ECONOMICS. In economic investigation, according to the classical view of it, abstraction is made from the mass of general human motives; and the effect of a selected few, or, as some have held, only one, of them is traced out first of all. One by one thereafter the elements, from which abstraction was made at the beginning, are restored to their place, and the conjoint effects of the conjoined causes are traced out with so much of accuracy as the case allows. But the degree of accuracy is not high, economic factors occurring as a rule in the midst of a very complex plurality of causes.

The disturbing effects of causes that are not economic, on the action of the causes that are strictly so called, may be regarded as an "economic friction."

Examples may be drawn not only from distribution and exchange but from production itself, especially if "laws of population" are to be included under that head. Not only the customs, but the vices, follies, and mistakes of men are accountable for economic friction. Economic tendencies, too, may be counteracted deliberately and advisedly by principles of morality, statesmanship, art, religion, or pedagogies. The favourite example of economic friction is perhaps taxation. If it be true (see Thorold Rogers, *Local Taxation*, Cobden Club pamphlet, 1886, p. 12), that taxes tend to stay where they are put, instead of being shifted where economic principles by themselves would have carried them at once, this is an undoubted case of economic friction. There is least of such friction perhaps in the

distribution of currency, and in the movements of capital on a great scale in modern business (see Bagehot's *Lombard Street*). There is probably most of it in wages and salaries, even in modern business, and in the agricultural rents and burdens of all backward countries and backward districts of advanced countries. Marshall's view of "long and short periods" (*Principles of Economics*, 1890, *passim*) would seem to involve that over a long period, in the major sense of "long," friction might be neglected. Some such conclusion is also implied in the view of Loria and others that in all history economical causes are supreme over all others. [Cp. Keynes, *Scope and Method of Pol. Econ.*, ch. iv. pp. 124 *seq.*, 1891; Loria, *La Constitution Sociale* (1893).] J. E.

Economic friction may further be described as the opposition encountered by the movements of capital and the inability of labour to meet readily the demand for work; and generally by all the circumstances which prevent economic forces from bringing about their natural effects the instant they come into operation. It is, for instance, matter of common observation that, though prices are affected by changes in supply and demand, they are not necessarily altered by these changes at once; and even when the effect on price can be detected, it is often not instantaneous, but gradual. The causes of friction are various, chief among them being the want of accurate knowledge. In the case of the demand for and supply of labour, this is an exceedingly important consideration, as also is the frequent immobility of labour. In the friction which affects the price of goods, want of knowledge often increases the delay experienced before matters are adjusted to meet new conditions. CUSTOM and HABIT, also, are factors in producing economic friction; prices, especially of valuable articles, where competition is restricted, do not move readily, no matter what change there may have been in the conditions of production or in the state of supply and demand. It is due, no doubt, to habit, or prejudice, that the effect of a new tax, or of the remission of an old one, though matters of universal knowledge, do not always reach the persons intended. The salesman and the manufacturer cannot always pass on an indirect tax to the consumer; nor can the owner of property always exact the full amount of a new rate from his tenant.

M. G. D.

FRIEDRICH, MARGRAVE KARL. See KARL FRIEDRICH.

FRIENDLY SOCIETIES. Friendly societies may be defined as insurance societies based on mutual principles: they are the means by which small tradesmen and the working class provide against sickness, old age, and the expenses of burial. They may possibly be traced to the guilds of the middle ages, or, at any rate, the disappearance of the guilds nearly

coincides with the rise of friendly societies; but practically they first became popular and important in this country at the beginning of the present century. The early history of friendly societies is a melancholy record of failures. They were constantly dissolved or becoming insolvent, through mismanagement, dishonesty, or other irregularity on the part of officers and members. So late as 1882 there were in workhouses in England no fewer than 3913 persons who had been members of friendly societies which had disappeared. But gradually a reform took place which may be summarised by saying that a system of premiums was substituted for a system of levies. These words call for explanation. A society on the levy system looks to its annual income to cover its annual expenditure, and any deficit is made up by a levy or contribution among its members. Now as the benefits of a society are mainly prospective, and as, therefore, the charges are lighter at first than after some years, this system clearly is not likely to secure permanence. On the premium system the probable charges in the future are calculated, and the annual payments scaled accordingly. The sheet anchor of this system is the valuation, which is made at intervals, generally of five years, and consists of an elaborate review of present position and liabilities of a society. It might be thought that the collection of averages of longevity and periods of sickness would by this time be sufficiently large to give an almost infallible guide; but, as a matter of fact, the circumstances vary widely in different cases. The prospects of a society depend on a vast number of conditions, as the habits of a population, the character of an occupation, etc.; so much so that it is the actual experience of the society which gives the best clue to its future. On the results of such a valuation the table of premiums is constructed and revised from time to time.

The simplest form of friendly society is that in which each member pays a weekly sum, and in return is supported during sickness, whilst at the end of every year the funds of the society, less a sum for a reserve fund, are divided amongst the members. Such a society clearly lacks most of the elements of permanence, but at the same time it serves a valuable purpose as an educator in habits of thrift. The ordinary "village club" goes a step farther, and aims at extending its advantages over a longer period. There is no division of funds yearly, and hence a greater stability, but this is often purchased at a considerable cost. The very permanence of the club invites a ruinous competition on the part of other clubs, with the result that premiums are lowered below the point required for solvency, whilst young men tend to form clubs of their own, thus breaking the succession which is essential to the con-

tinuance of a club: again, greater opportunities are given for dishonesty on the part of officers. It is not necessary to dwell on the various kinds of object, etc., which distinguish village clubs, some of which tend to become savings-banks rather than friendly societies. The difficulties in the way of the success of such clubs are partly met by county clubs. Of these the area is the county, and the management is generally in the hands of the clergy, magistrates, and others, with rules and premiums carefully framed to guarantee solvency. But these advantages entail considerable sacrifices. There is far less of the social element, which has a high educational value in the village clubs; the area is too large for any common interest in the management, and therefore there is none of the political training which self-governing societies give; it is too large also to ensure that thorough supervision by neighbours, which is essential in all cases of persons drawing sick allowances, to prevent malingering. As a result county clubs are not able to offer sufficient advantages to their members to compete with other clubs. The difficulty of finding an area sufficiently small to insure good supervision, neighbourly relations, and self-government, and yet large enough to secure good business capacity at the head of affairs, and sound general principles, is met by the affiliated orders, the largest of which are the Foresters and the Manchester Unity of Odd-fellows. The unit here is the lodge, which may consist of any number of members, is generally on a local basis, has its own officers, rules, etc., is independent both of control and of support. Above the lodge comes the district, a geographical grouping of lodges, and above the district the order, which comprises a general committee of management, elected by the various districts and lodges, officers of the order, etc. The relations between the order and the lodges differ in different societies. In some cases the order formulates principles, tables of premiums, etc., in others it takes certain business, *e.g.* life insurance or pensions, and treats it as a central rather than a local matter; in all cases it is ready with advice in the formation and management of a lodge, and the fact of such a body with large experience bringing pressure to bear on ill-managed lodges, being ready with friendly help in times of stress, and having an indirect control does much to promote sound management. In some cases the name of friendly society is applied to companies which for a fixed payment, weekly or monthly guarantee a sum in the event of death, and are commonly known as "Collecting Societies." They differ from friendly societies in the following points: (1) They give no relief in sickness; (2) they have no common bond of union amongst the insured; (3) they have paid collectors and a hierarchy

of officers, as agents and inspectors, but no self-government. In them, it has been said, "the officials are everything, the members are nothing." But although these societies do not fulfil the objects of friendly societies, we must be careful to avoid underrating their usefulness.

The history of the laws affecting friendly societies illustrates the attitude of government in this country towards combined independent effort. The original Friendly Societies' Act of 1793 (33 Geo. III. c. 54) was of a permissive kind. It granted certain advantages to such societies as had exhibited their rules at quarter sessions and had them approved. In 1829 by 10 Geo. IV. c. 56 the justices were supplemented by a barrister-at-law appointed for the purpose, to whom all societies seeking registration were to exhibit their rules for approval. In 1846 by 9 & 10 Vict. c. 27 the barrister was given the title of Registrar of Friendly Societies, and the justices were relieved of their duties in registration. In 1850 (13 & 14 Vict. c. 113) an attempt was made to give some certificate of solvency, but the distinction between "certified" and "registered" societies was abolished in 1855. In 1875 an act was passed (38 & 39 Vict. c. 60) as the result of a commission of inquiry which, with some amendments, is still law. By this act the definition of a friendly society is made as wide as possible, registration is facilitated, and the powers of the registrar are enlarged. The registrar can not only refuse to register, suspend, or cancel registration, but, at the request of the members of a society, he can interfere in its management, can order an examination of its affairs, and, if he think fit, dissolve it. He can also act as arbitrator in disputes between a society and its individual members. But his powers and his sphere of activity are strictly limited. The fact is still often overlooked, but should always be borne in mind, that registration is no guarantee of the soundness of a society. It ensures publicity and publicity only. It does not even imply that the tables, etc., of a society are after an approved model—the government have always declined the responsibility of putting out such a model. In the case of registered societies the government insists that certain rules should be carried out, that *e.g.* the management should be separated from the benefit branch, that annual returns and quinquennial valuations by skilled persons should be sent to the registrar, and failure to comply with these rules renders the officers of a society liable to prosecution, and the society itself to have its registration suspended or cancelled. Indirectly this cannot but operate strongly in favour of sound management, but the limitations of the central office may be gathered from the statement of the late chief registrar that he held himself precluded from communicating to a member of a society the fact of its insolvency, and from

taking any step to publish the fact. Briefly, the advantages of registration to a society are these:—It can hold property, can sue and be sued, can proceed against fraudulent officers summarily, has a first claim upon the estates of deceased officers, can invest in government securities, can be easily and cheaply dissolved, is exempt from certain, now inconsiderable, stamp-duties. Against these privileges must be set the following restrictions:—The rules must be according to an authorised pattern, must approximate *i.e.* to a prescribed type, the field of investment is narrowly limited, elaborate returns must be made to the chief office. The habit of registration is *growing*, the number of accurate returns increases steadily, the total number of societies now registered is in Great Britain and Ireland 29,543, but it is impossible to say what proportion this forms of the whole.

The relations of the state to friendly societies in this country have been of a uniformly permissive character. The state has never insisted upon registration, or upon uniformity of management, premiums, etc., among the registered societies, and it has given up the attempt to guarantee their solvency. It has assisted them in a variety of ways. It has always been ready to advise as to management, to facilitate procedure in prosecutions for fraud. It has given exemptions from taxation and pecuniary aid in the form of a rate of interest above the normal, but these have gradually lost importance. The chief assistance which it has given of late years has been the conduct of a rival institution in the annuity or insurance branch of the post-office, the development of which is strongly urged in some quarters. In France and Germany the action of the state has been far more extended. The tendency in France is to interfere with independent societies by legislation, in Germany to take over the whole business of insurance against sickness, funeral expenses, etc., and constitute a department of the administration to conduct it.

[Hardwick, *History of Friendly Societies*.—Wilkinson, Rev. J. F., *The Friendly Society Movement*, 1876.—Bährreither, J. M., *English Associations of Working Men*, English ed., 1889.—Ludlow, J. M., and Loyd Jones, *Progress of the Working Class*, 1867.—Neison, F. G. P., *The Manchester Unity of Oddfellows*, 1869.—*Chief Registrar of Friendly Societies, Reports of*, 1857-91.—Pratt, *Laws Relating to Friendly Societies*, 11th ed., by Brabrook, 1888.—*Royal Commission on Friendly Societies, Report of*, 1874.—*Select Committee H.C. on Friendly Societies, Report of*, 1888.—*Select Committee H. C. on National Provident Insurance*, 1886.] L. R. P.

FRIENDLY SOCIETIES, THEIR NUMBERS AND CONSTITUTION. The statement of the successive enactments affecting friendly societies contained in the previous article shows that, however they may have varied in detail, the main principles

of legislation have never been departed from since 1793. Thus there has been for more than one hundred years a recognition by the state of these voluntary bodies as worthy of encouragement, and in some sort of protection; but there has never yet been any attempt to restrain the free association of citizens for the purpose of mutual aid. The suggestion has often been made—why should societies be allowed to exist if they will not comply with certain conditions? but the wisdom of the legislature has always hitherto consistently rejected it. Hence registration has always implied the granting of facilities and privileges upon certain easy conditions, rather than the imposing restrictions and penalties; and the swing of the pendulum from one side to the other has been marked by an increase or diminution respectively in the number of societies registered. The act of 1793 was purely enabling; that of 1819 restrictive; that of 1829, and still more that of 1834, enabling; that of 1846, and still more that of 1850, restrictive; that of 1855 enabling, and that of 1875 somewhat restrictive. Under the enabling acts, registrations have been numerous; under the restricting acts they have been few. There is no doubt, however, that the formation of friendly societies goes on irrespectively of legislation; and that unregistered friendly societies abound during the periods of restriction. The act of 1875 still, in substance, regulates these societies, the Friendly Societies Act and the Collecting Societies and Industrial Assurance Companies Act, 1896, altering it in form only. An amending Act was passed in 1908.

In Middlesex alone nearly 1000 societies were enrolled soon after the passing of the act of 1793, and the number in some other counties was almost as great. Between 1793 and 1855 as many as 26,034 societies had been enrolled. The act of 1855 provided for making annual returns to the registrar, and directed him to make an annual report to parliament. It was then ascertained that more than 800 of these societies had been dissolved, and that more than 700 were not for the purpose of assuring sick pay. Of the remaining 24,500 societies, nearly 3000 could not be found, leaving about 21,500 societies as presumably still in existence. An attempt was made to ascertain how long the various societies had been established; but only 3073 answered the question. Of these it appeared that more than 100 had existed for many years before the act of 1793, and that as many as 20 societies claimed to be centenarians by the middle of the 19th century.

Of the 21,500 societies, about 2800 were in Middlesex; 2045 in Lancashire; 993 in Staffordshire; 979 in Yorkshire; 874 in Warwickshire; 752 in Surrey; 681 in Devon; and 642 in Kent. They are thus found to have been distributed among the manufacturing and

agricultural districts ; and in fact to have over-spread the country, and to have met the wants of all classes of its working population.

A considerable number of the societies which existed before 1793, and took advantage of the act of that year to enrol their rules, are still in existence. They have in general only a small number of members ; indeed, it was not unusual in the early days of friendly societies to limit the number. This was of great advantage in maintaining the friendly feeling which it was one of the main purposes of these societies to encourage among their members ; and it gave rise to a sentiment very common among them, that the benefit of sick pay and even of funeral money should not be claimed except in case of necessity. By this means, many societies whose contributions would not have been sufficient to provide the benefits, as a matter of insurance, were able not only to meet all claims which the members cared to make upon them, but also to accumulate funds from year to year. In some of these societies members would introduce their sons, and the society would continue from generation to generation among members of the same families. This is particularly marked in the very interesting group of societies founded among the Huguenot settlers. Some of them were formed by a number of persons coming from the same town or village, as the society of Lintot, which originally consisted wholly of persons deriving their family origin from Lintot, and still contains many members who can trace their descent back to the original settlers from that district. Those excellent, laborious, and thrifty men, who created new industries for us, and gave the British workman many valuable lessons, were largely pioneers in the good work of establishing friendly societies also.

In the twenty years from 1855 to 1875 as many as 21,875 societies were registered, or an average of 1094 per annum. Some allowance has to be made, however, for duplicate registrations ; when a society sent up for registration a complete set of rules, it was not always easy to ascertain whether the society had been previously registered or not. Under the act of 1855 all branches of societies were registered as separate societies. The act of 1875 has made a clear distinction between them, and contains various provisions against duplicate registry. Under that act, from 1876 to 1904, 7276 societies and 13,054 branches were registered, being an average of 243 societies and 435 branches each year. There was thus a certain diminution in the new registrations, which became more significant when closely looked into ; for a large proportion of the registrations of new societies were such as were exempt from the obligation of making a quinquennial valuation, the onerous but most beneficial provision which the act of 1875 introduced. Many were dividing societies ;

others were juvenile societies ; and from both these classes valuations are not required. A dividing society, as it does not seek to accumulate funds, but to distribute them, does not look forward to the future, but contents itself with provision for the wants of the immediate present. A juvenile society, which consists wholly of members under twenty-one years of age, is a mere resting-place on the way to membership of an adult society, and ought not to be permitted to accumulate funds.

The efforts of the registrar have been directed, since the passing of the Act of 1875, to the gradual enforcement of its provisions relating to valuation, without bearing with undue severity on the societies. For this purpose, it has been necessary, after fair warning, to suspend and ultimately to cancel the registration of many societies, and to take proceedings against others and recover penalties. The result of these measures has been, that in each period of five years the number of valuations received and the number of grants of dispensation from valuation added together, have tended more nearly to reach the total number of registered societies known to be in existence. The results of the valuations have been such as to excite serious anxiety in the friends of the societies. Of 14,988 valuations received during the five years ending 1890, only 3122 showed a surplus ; the aggregate of such surpluses amounting to £1,781,319, while 11,866 showed a deficiency ; the aggregate of such deficiencies amounting to £10,734,515. This statement must not be misunderstood. It did not mean that it would be necessary to raise more than ten millions of hard cash to make friendly societies solvent. It meant that each society must materially diminish the benefits promised to its members, and materially increase the contributions exacted from them, besides raising a certain sum in cash, in order to make both ends meet. Assuming that the 11,866 societies in question had something more than 3,000,000 members, a contribution of £1 from each member would have raised about one-third of the deficiency, leaving the other two-thirds to be met by reduction of benefits and increase of contributions. It must be remembered, moreover, that the valuations themselves are mere estimates, founded on a great variety of hypotheses as to the liability to sickness and mortality and the rate of interest, and that a valuer who wishes to make things pleasant for a society may adjust his hypothesis to that view ; while another may exaggerate the valuation deficiency by omitting to take into account favourable considerations that are essential to the true view of the society's position.

The societies with branches, commonly called the affiliated orders, though showing very considerable deficiencies, appeared to be in a some-

what better position than the independent societies, in which latter term, however, were included many societies which were really branches of affiliated orders, but had done nothing since the act of 1875 was passed to constitute themselves legally so. The registered branches were then 11,242: of these, 2281 showed surpluses amounting to £874,679; and 8961 showed deficiencies amounting to £6,716,838. The societies registered as independent were 3717, of which 827 showed surpluses amounting to £658,252 and 2890 deficiencies amounting to £3,901,435. The collecting societies are not included in these figures. In speaking of branches, it should be understood that the insurances effected by each branch are not guaranteed by the central bodies of the orders, and that for financial purposes they are in the same position as the independent societies. This is almost universally true as regards the insurance of sick pay. For insurance of funeral money, branches are grouped into districts. In the largest and most progressive of the orders, the Manchester Unity of Oddfellows, an arrangement exists by which a lodge in distress may seek help from the district to which it belongs, and a district in distress from the central body of the Order. Other orders are also making strenuous exertions to reduce the deficiencies shown by the valuations of their courts and lodges. These bodies possess great advantages in their annual meetings for conference and discussion. To be the chief of an organisation having nearly a million members, called upon to preside over meetings constituted of their delegates, is a distinction much coveted and an honour highly prized.

The following is a summary of Registered Provident Societies in Great Britain and Ireland at 31st December 1906:—

	No. of Returns.	No. of Members.	Funds.
BUILDING SOCIETIES—			£
Incorporated Societies	1,904	559,103	55,894,068
Unincorporated Societies	60	57,626	16,364,370
FRIENDLY SOCIETIES,	1,964	616,729	72,253,428
ETC. (1905)—			
Ordinary Friendly Societies	6,773	3,226,672	18,056,640
Societies having Branches	20,144	2,673,246	23,883,491
Collecting Friendly Societies	45	7,884,307	3,469,767
Benevolent Societies	74	28,787	324,418
Working Men's Clubs	958	243,521	334,559
Specially Authorised Societies	153	80,494	678,003
Specially Authorised Loan Societies	654	126,849	796,659
Medical, Shipwreck, etc., Societies	95	326,883	62,550
Cattle Insurance Societies	58	4,819	8,275
Shop Clubs	7	11,441	1,150
	28,961	14,606,969	52,620,542

	No. of Returns.	No. of Members.	Funds.
CO-OPERATIVE SOCIETIES—			£
Industries and Trades Businesses	2,268	2,351,686	50,542,421
Land Societies	186	98,415	977,821
	2,782	17,705	1,440,565
		2,467,806	52,960,807
Trade Unions	645	1,719,031	5,864,342
Workmen's Compensation Schemes	51	103,444	193,794
Friends of Labour Loan Societies	252	33,500	257,643
Total Registered Provident Societies	34,655	19,547,479	184,155,556

While the average contribution per member in an independent society, assuring both sick pay and funeral money, is about 18s., in a branch it rises to about £1:6s., which seems to show that the affiliated orders are seeking to raise their contributions more nearly to the amount required to meet the benefits assured, and that they are able to give greater benefits than the independent societies. Of the £1:6s., about 2s. 3d. goes for management, or about 10 per cent, which is a moderate proportion, and it implies that in general the officers receive a very low rate of remuneration. If it be assumed that the £1:6s. represents from one to one-and-a-half week's income of the member, it must be admitted that he obtains a considerable benefit by way of insurance at a sacrifice of a comparatively small portion of his revenue.

The relation of friendly societies to provisions for old age is a matter that has recently received much consideration. Statistics have been sought of the number of paupers who have been members of friendly societies, with a view to throw discredit on the societies by implying that they have failed in their purpose of preventing pauperism. The result is very small, when compared either with the whole number of paupers or with the whole number of members of friendly societies, and the inference drawn is not a sound one. The primary object of a friendly society is not the preventing pauperism in old age, but the providing relief to a man generally able to work, yet momentarily prevented from doing so by sickness. Some societies, it is true, have tables under which a definite annuity in old age can be purchased; and where that is the case, such tables are required by law to be certified by an actuary; hence these societies are in general well able to fulfil their contracts, and their members are not those who are found in workhouses. The other societies, which do not pretend to assure against old age, do not affect to provide against

pauperism, and are therefore liable to no reproach if their members become paupers. Many societies, however, without insuring old-age pay, insure sick pay throughout the whole of life; and by a lax interpretation, inspired by a benevolent sentiment, promise their members what is in effect a pension, though usually very small in amount. Such societies actually pay this pension under the name of permanent sick pay, until it is claimed by so many members, and so persistently, that the funds will not support the burden; and it is these societies which swell the number of failures. Sounder views on this point are being entertained by the leaders of friendly society opinion. The effect of the Old Age Pensions Act, 1908, on Friendly Societies is not yet apparent.

Of 4123 valuation returns received in 1907, 607 were from friendly and collecting societies, showing the following results:—

	Assets.	Liabilities.
	£	£
Number of members, 503,404.		
Funds	2,426,230	
Present value of benefits		6,695,543
Present value of contributions	2,840,036	
Other liabilities		633,611
Other assets	358,278	....
Aggregate of estimated surpluses in 210 societies	....	208,602
Aggregate of estimated deficiencies in 397 societies	913,117	....
Total	7,537,661	7,537,661

It will be observed from the above figures that of the total number of valuations received during the year from friendly societies, 65 per cent disclosed deficiencies, as against 35 per cent showing surpluses, and that the aggregate net deficiency amounted to £704,615. Hence it appears that the liabilities exceed the assets by 9·61 per cent. That is to say, the societies were collectively, at date of valuation, in a position to pay 18s. 1d. in the £ of their estimated future liabilities.

In the collecting societies the rates of premium charged are high enough to allow of an inordinate expenditure, approaching and sometimes exceeding 50 per cent, so that a member pays away 1d. to the officers and collectors for their remuneration for every 1d. he invests for his own benefit. The collection of small sums periodically is necessarily a costly affair, and until the working classes can be persuaded to dispense with the services of the collector they must be prepared to pay him for the work he does. On the present system, the pay is so high that a collecting-book is a valuable commodity and is often passed from hand to hand for a considerable sum.

The privileges granted to friendly societies by existing Acts may be summed up as follows:—

1. The right to hold land.

2. The summary remedy in case of misapplication of funds.

3. Priority of claim on estates of deceased or bankrupt officers.

4. Transfer of stock by direction of the chief registrar.

5. Exemption from stamp duty on all documents of the society.

6. Permission to admit persons under twenty-one years of age as members.

7. Reduction of the fee for certificates of birth and death.

8. Power to invest with the National Debt Commissioners.

9. Admission of trustees to copyhold property at a single fine.

10. Discharge of mortgages by endorsed receipt without reconveyance.

11. Power to call officers to account and recover property from them.

12. Power to settle disputes in the manner the rules provide.

13. Power to insure the funeral expenses of members' wives and children.

14. Power to members to nominate for sums at death up to £100.

15. Power to pay sums under £100 without administration.

16. The services of a public auditor at a fixed scale of fees.

17. The recording of its documents in the office of the registrar.

In order to restrict these privileges to societies whose members are mainly of the working class, it is enacted that no society shall insure more than £300 on a death or other event, or more than £50 by way of annuity. In fact, these limits are rarely reached. Several wealthy and prosperous mutual assurance societies were originally established as friendly societies, but by an act passed in 1854, they were discharged from the provision of the Friendly Societies Acts, except so far as relates to the registration of trustees, which still takes place with regard to some of them, and is the only relic of their original constitution.

E. W. B.

FRITH-GILDS, see GILDS.

FRUGALITY, see THRIFT.

FUGÆ WARRANT (Scotland). A warrant to apprehend a debtor, foreigner or native, who meditates or is reasonably believed to meditate flight from Scotland. It is granted by a magistrate, usually the sheriff; the creditor applies for the warrant, giving upon oath or affirmation his claim of debt, which may be even a contingent debt, and his grounds for believing that the debtor means to fly from the country; the magistrate makes inquiry into the facts; he may then grant a warrant to arrest the debtor for examination; and this may be followed by a warrant to commit the debtor to prison until he finds security to appear in court. The creditor is liable in damages if his statements are unfounded. The sheriff's warrant may be executed in any Scottish county, if backed but has no force outside Scotland.

A. D.

FUGGERS. A well-known German merchant family, and an interesting example of hereditary enterprise and success. They came originally from Suabia; at least as early as the 14th century they settled at Augsburg. The first known by name, Hans Fugger, was a poor weaver. His descendants became traders as well as artisans, Ulrich carrying on trade early in the 16th century in the Baltic and the Mediterranean, and Jacob importing goods direct from India instead of by way of Venice. A little later they added banking to their other undertakings, though hitherto none but Jews and Lombards had traded in money; Alexander (died 1560) even set up counting-houses in India and Venezuela. Their willingness to lend immense sums of money to the emperors Frederick III. and the impecunious Maximilian, to Charles V. and to Philip II. of Spain, fixed the family fortunes. Lands and mines, first given as security, were retained in full ownership when the loans were not repaid. To estates titles were added; by marriage and purchase new lands were continually acquired; at the same time the family trade was kept up. "Rich as a Fugger" became a proverb. With liberality proportioned to their wealth they were foremost in public spirit; they were founders of religious and charitable institutions, they were patrons of art and learning; one collected antiquities, another brought together a fine library of books and MSS. Some branches of the family are still in existence.

[Von Stetten, *Geschichte der adelichen Geschlechter in der freien Reichs-Stadt Augsburg*.—Say et Chaillay, *Dictionnaire d'Économie Politique*. Genealogy in Hübner's *Gen. Tabellen der Reichs-Gräflichen Familien*.—Portraits in *Pinacotheca Fuggerorum S. R. I. comitum ac baronum in Kierchberg (Kirchberg) et Weissenhorn*, by Custos and L. and W. Kilian, 1754.—Coins in Kull's book, *Die Münzen des gräflichen und fürstlichen Hauses Fugger*, 1882.—The mining operations of the Fuggers are described in Jacob, *On the Precious Metals*, i. 276.] E. G. P.

FULLARTON, JOHN (c. 1780-1849), writer on currency. After having been an assistant surgeon in Bengal from 1802 to 1813, Fullarton became partner in a bank at Calcutta; and, having there acquired a fortune, retired to England. He contributed some articles to the *Quarterly Review* at the time of the reform. But he is principally remembered for his book on *The Regulation of Currencies* (1844), a work "of exceeding ability" in Prof. Walker's words.

An uncompromising assailant of the CURRENCY PRINCIPLE (*q.v.*), Fullarton maintains the impossibility of over-issuing a convertible currency (ch. v.). "The self-regulating principle of a convertible currency operates in every such case with the precision of clock-work" (*Ibid.*). Mill places Fullarton with Tooke as one of "the most prominent representatives" of the

"counter-theory," which is the extreme opposite of the currency principle; quotes an important passage from him, and adds: "I believe that the theory grounded by Mr. Fullarton upon this fact [the action of the country bankers] contains a large portion of truth, and is far nearer to being the expression of the whole truth than any form whatever of the currency theory" (*Political Economy*, bk. iii. ch. xxiv. §§ 1, 2) Prof. Walker strikes the balance of judgment less favourably to Fullarton's views (*Money*, p. 426 *et seq.*). For a very unfavourable estimate of Fullarton's book see Col. Torrens, *Principles and Practical Operation of Sir Robt. Peel's Bill of 1844 explained and defended against the objections of Tooke, Fullarton, and Wilson* (1848).

Besides the main thesis of Fullarton's work, there are in it important minor contributions to monetary science. Thus at p. 23 (ed. 1845) he attributed to an inconvertible currency much the same defects as Mill afterwards did (*Pol. Econ.*, bk. iii. ch. xiii.); with this additional remark as to the supposed possibility of regulating the paper currency by the price of bullion: "it is quite a mistake to suppose that the market prices of the precious metals would observe the same range of fluctuation, when those metals should be reduced to a common footing with other commodities, which they observe when constituting the circulating medium of a country"; in proof of which he adduces the fluctuations in the price of gold during "the hundred days." Many other interesting historical allusions occur.

On the regulation of Currencies, being an examination of the principles on which it is proposed to restrict within certain fixed limits the future issues on credit of the Bank of England and of the other banking establishments throughout the country, 1st ed. 1844, 2nd ed. 1845.

[Mill, *Political Economy*, bk. iii. ch. xxiv.—Walker, *Money*, *sub voce* Fullarton.—Wagner, *Beiträge zur Lehre von den Banken*, ch. v.—*Athenæum*, 3rd Nov. 1849, *Economist*, 28th Sept. 1844].

See also CURRENCY PRINCIPLE.

F. Y. E.

FUMAGE. See HEARTH TAX.

FUNCTIONS. When two quantities are so selected that any variation in one is attended with some variation in the other, the latter is said to be a function of the former; and is called the dependent variable—dependent on the other variable which is called independent. In symbols: $y=f(x)$, where y is the dependent, and x the independent variable. For the symbol f some other letter, usually of cognate sound, as ϕ or ψ , is often used. The following are particular examples; $y=a+bx$; $y=a+bx+cx^2$; $y=a+\log(b+cx)$; where a , b , c are constants. One of the most important properties of a function is the rate at which it increases or decreases as the independent variable is increased. This rate is measured by another

function which is called the derived function, or differential co-efficient: in symbols $f'(x)$ or $\frac{dy}{dx}$. Thus, if y , the original function is $\log(a+bx)$; it is found that the derived function is $\frac{b}{a+bx}$, supposing that "natural" (or Napierian) logarithms are used; otherwise the expression in the text must be multiplied by a certain constant. Whence it appears that the rate at which y increases with an increase of x is less for larger values of x . A derived function has its own derivate, called, with reference to the primary function, the second derived function or second differential co-efficient.

Thus, in symbols $f''(x)$, or $\frac{d^2y}{dx^2}$ the second differential of $\log(a+bx)$ is $\frac{-b^2}{(a+bx)^2}$; denoting

that the rate of increase measured by the first differential diminishes at a rate which is slower for larger values of x . This notation and conception is extended to the case of two (or more) independent variables. The symbols $z=f(x, y)$ denote that any variation in either of the independent variables x or y is attended with some variation in the dependent variable z . The rate of variation due to change in each variable may be separately measured. The measure is called the differential co-efficient with respect to either x or y as the case may be; in symbols $\frac{df(xy)}{dx}$ and $\frac{df(xy)}{dy}$; or more shortly $\frac{df}{dx}$ and $\frac{df}{dy}$.

An important inquiry with respect to any function is: what are the values of the independent variables for which the dependent variable is a maximum or minimum. The solution of this problem, in the case of a function of a single variable, is given by the equation $f'(x) \left[\text{or } \frac{df}{dx} \right] = 0$.¹

Thus the value of x , for which the function $\log(a+bx) - cx$ is a maximum, is found by equating to zero the first differential of that function

namely, $\frac{b}{a+bx} - c$. Whence the value of x is

found to be $\frac{b-ac}{bc}$. In the case of two (and

mutatis mutandis more) independent variables there are two simultaneous equations of the form $\frac{df}{dx} = 0$ $\frac{df}{dy} = 0$, to determine the values of x and y for which z the independent variable is a maximum or minimum.

These mathematical principles have important applications to political economy. The propositions in virtue of which economics may claim to be an exact science, involve the ideas of a function and its variation. The Law of

DIMINISHING RETURNS (*q.v.*) may be thus stated: $y=f(x)$, where x is the amount of outlay (on a given portion of land), y is the corresponding return, and f is such a function that f' continually decreases as x increases: or, in other words f'' is always negative. The logarithm, as has been shown above, is such a function; and, accordingly, this simple function was used by Malthus to express the relation between increasing population and subsistence; for such is the import of his statement, that the one increases in arithmetical, the other in geometrical, progression. The vain disputes to which this dictum has given rise illustrate the advantage of using the general language of symbols. A similar notation may be employed to represent the analogous Law of Diminishing Utility (see UTILITY). The Law of INCREASING RETURNS (*q.v.*) might be represented by a function, like $a+bx+cx^2$, whose first differential, $a+b+2cx$, continually increases with the increase of x . It has been well said that every theory in economics may be regarded as the solution of a problem in the calculus of maxima and minima: to obtain the greatest satisfaction with the least effort and sacrifice being the aim of the economic man. The language of that calculus is the mother tongue of abstract economics. The simplest economic problem, the case of one commodity x being exchanged against another y in a perfect market, is governed by the principle that each party seeks to maximise his advantage considered as a function of the amount which he obtains of one commodity, and parts with of the other. The equations which determine the position of maximum are given by Jevons (*Theory of Political Economy*, ch. iv.; cp. Marshall, *Principles of Economics*, 2nd ed. Mathematical Appendix, note xii. *sub finem*). Especially where the number of variables is considerable the use of functions is required; since in that case geometrical illustration is not available. The difficult theory which Prof. Marshall formulates as the Law of SUBSTITUTION (*Principles of Economics*, passages referred to in Index, *sub voce*) is perhaps most easily deduced by regarding the profit of the entrepreneur as a function of the amounts of each agent of production which he employs. Say $z=f(x_1, x_2, x_3 \text{ etc.})$ The condition that z should be a maximum gives the

equations $\frac{df}{dx_1} = 0$; $\frac{df}{dx_2} = 0$, etc. This is the equi-

valent of the proposition that "the tendency of every one to select the best means for obtaining his own ends . . . would have caused each several kind of labour or machinery, or other agent of production to be used for each several purpose until its further use was no longer remunerative; the employment of each several agent in each branch of production would have been extended until full advantage has been taken of its special fitness for the work" (*Prin-*

¹ To discriminate a maximum from a minimum, a second condition is required; and is afforded by the sign of the second differential co-efficient.

² See note 1.

ciples of Economics, 2nd ed. p. 559, cp. Mathematical Appendix, note xiv.). Still more generally we may regard the "net advantages" of the economic man as a function of two sets of variables, corresponding to his efforts and sacrifices, and his consumption. The position of equilibrium is then determined by two sets of equations of the form,

$$\frac{df}{dx_1} = 0, \frac{df}{dx_2} = 0, \text{ etc.}$$

$$\frac{df}{dy_1} = 0, \frac{df}{dy_2} = 0, \text{ etc.}$$

In the light of such general theories the dispute whether normal or natural value is determined by utility or cost of production appears nugatory. You might as well ask whether, when two unknown quantities, x and y , are determined by two simultaneous equations, x or y contributes more to the solution.

[A knowledge of the theory of functions sufficient for the economist is afforded by the introduction to the second edition of Prof. Walras's *Éléments d'Economie Politique Pure*.—Pantaleoni, *Econ. Pura*; and by Mr. Wicksteed's *Alphabet of Economic Science*.]

F. Y. E.

FUNDED DEBT. This expression was originally used as a description of debt, the service of which was secured by a special fund (e.g. the produce of a certain tax) but gradually the meaning acquired by the term was that of debt raised for permanent purposes and either repayable at a distant date or not repayable at any definite date. The funded debt of the United Kingdom belongs to the latter class but the government have the right to redeem after a fixed period; e.g. the local loans stock is redeemable from 1912, the new consols (Goschen's) from 1923. This does not, however, prevent a gradual reduction of the funded debt before the periods named; this is accomplished in the following way. A fixed yearly sum, 25 millions since 1889, is applied to the service of the debt, and any amount not required for payment of interest is used by the National Debt Commissioners for the purchase and subsequent extinction of parts of the funded debt. Another mode of reducing the debt is the conversion of consols into **TERMINABLE ANNUITIES** (q.v.). The funded debts of foreign countries are frequently repayable at fixed dates either gradually, by yearly purchases or drawings, the funds being supplied by a regular sinking fund, or by simultaneous repayment of the whole issue. The consolidation of the funded debt of a country into one stock is convenient for many reasons. [For unfunded debt, see **FLOATING DEBT**. For general history, see **NATIONAL DEBT**.]

E. S.

FUND, SINKING. See **SINKING FUND**.

FUNDING SYSTEM. This expression, which properly denotes the system of creating **FUNDED DEBT**, came to refer specially to a

particular abuse of the system. (See **NATIONAL DEBT**.)

C. A. H.

FUNDS, THE PUBLIC. See **DEBTS, PUBLIC**.

FUNGIBLES—a term borrowed by the mediæval economists from the Roman lawyers, *res quæ mutud vice funguntur* (are interchangeable). By both it is opposed to **CONSUMPTIBLES** (q.v.), but whereas in law fungibles are those things which, when borrowed, have to be returned *not in specie*, but *in genere*, in economics the term is employed to denote things of which the use is prolonged, as, e.g., a house. For these interest was permissible, whereas to exact interest for the former was to sell a thing and also to charge for its use, consequently it was unjust. Money was classed as a *consumptible*, and usury declared to be wrong (see **CANON LAW**).

[Thomas Aquinas, *Summ. Theol. Secunda Secundæ*, lxxviii.—Ashley, *Economic History*, vol. i. ch. iii.—Böhm-Bawerk, *Kapital und Kapitalzins*.—Block, *Les Progrès de la Science Économique*, vol. ii. p. 332 (for a revival of the controversy by Pothier and Turgot).]

L. R. P.

FUOCO, FRANCESCO, who died at Naples, 1841, passed his life under the pressure of want, a long exile, and even the necessity of selling some of his works, for which other and ignorant persons got the credit. He possessed above any of his contemporaries a keen spirit, apt to study, suited to economic investigation; but never enjoyed the comfort of seeing his works valued in their true light. To **SCIALOJA** (1840) and **MOHL** (1844) is due the honour of reviving his fame by their eulogies; Professor Ricca-Salerno (*Storia delle Dottrine Finanziarie in Italia*, Roma, 1881), and T. Fornari (*Delle Teorie economiche nelle Prov. Napoletane dal 1735 al 1830*, Milano, 1888) wrote later and at greater length on his theories.

Fuoco treated all the most important theories of economic science. The *theory of method* in his opinion should be positive, using mathematical formulæ. The *theory of value* he analyses with a peculiar insight, supporting in general the doctrine which bases the value of things on their utility, and derives the measure of value from the comparison of quantity and quality. He was the first in Italy to acknowledge the importance of Ricardo's theory of rent,—which he fully supports, particularly fixing attention on the rent derived through *situation*. He wrote on population, industry, and other social matters, arguing as a final thesis that moral and economic principles are reducible to a common basis. He also discussed coinage and bank questions, especially in one of those works (*La magia del credito svelata*) which he sold under the burden of want, to Giuseppe de Welz of Como, who published it under his own name. Fuoco had written this work to support the financial policy of the minister Medici. In this work he proved, with great brilliancy, that credit multiplies capital—a thesis which was afterwards considered from

another side and with a more severe logic by Francesco Ferrara, the greatest economist of our modern days in Italy (see *Biblioteca dell' Economista*, ii. S. vol. vi., Torino, 1857, Introduzione).

[*Saggio sui mezzi da moltiplicare prontamente le ricchezze della Sicilia* (G. de Welz), Parigi, Stamperia Firmin Didot, 1822.—*Comento di commento, ossia lettere critiche del Sig. F. N. sul Saggio del Sig. G. de Welz riprodotto dal Sig. Dr. in medicina*, Giuseppe Indelicato, Napoli, Stamp. Francese, 1823.—*La magia del credito svelata*, Napoli, Stamperia Francese, 1824, 2 vols. (G. de Welz).—*Saggi economici*, Pisa, Stamp. Nistri, 1825-27, 2 vols.—*Introduzione allo studio della Economia industriale, o principi di Economia civile applicati all' uso delle forze*, Napoli, Stamp. Trani, 1829.—*Le Banche e l'Industria*, Napoli, Stamp. Severino, 1834.] A. B.

FÜRSTENAU, KARL GOTTFRIED (1734-1803), a theologian and lecturer on economics, Hebrew, general literature, and logic in the University of Rinteln (East Prussia), his native town, where in 1786 he became *primarius* of the Faculty of Philosophy. In 1779 was published, at Cassel, his *Apologie des physiocratischen Systems*, highly esteemed by his contemporaries. Fürstenau, although a firm adherent of the doctrine of the physiocrats, did not conceal his opinion that it was impossible to apply its practical conclusions in old countries, organised on an antagonistic basis.

E. Ca.

FUSTEL DE COULANGES, NUMA DENIS (1830-1889). The aim of the most important works of M. Fustel de Coulanges is to establish a bridge over the obscure gap which separates the institutions of Roman Gaul from those of mediæval France; in particular, he has very carefully worked out a theory of the origin of feudalism and the manor, which is in many respects worthy of study even by those who differ from the results at which he arrives.

Though not the first published of the author's works, the *Recherches sur quelques problèmes d'histoire* is in many ways the first in order. It consists of four essays entitled *Le colonat Romain*, *Du régime des terres en Germanie*, *De la marche Germanique*, and *L'organisation judiciaire dans le royaume des Francs*. The first three essays are directly connected with the third volume of the *Histoire des institutions politiques de l'ancienne France*, which has for sub-title *L'allée et le domaine rural*, and may be treated of with that work. Together they contain the author's theory of the manor, and demand a fuller treatment than his other work, inasmuch as they deal with questions which touch economics more nearly.

The starting-point of the history of the manor is to be found, according to M. Fustel de Coulanges, in the institutions of the Roman empire. The system then existing was one of complete private ownership of land with certain peculiar characteristics. The country was

divided into estates or "domains," each normally under one proprietor, who had full powers of alienation and bequest. Each estate was, as a rule, compact, and possessed a name by which it was known and which adhered to it. One proprietor might own many such estates not contiguous. But the estate in itself remained an organised unit never divided and rarely uniting with another to form a new unit. The cultivation of such an estate in the later empire was carried on partly by slave labour employed upon land retained in the owner's own possession. But side by side with this another system had grown up. Certain slaves were allowed as a privilege to become tenants-at-will of parts of the estate, paying for their land partly at any rate in services performed on the remaining land. The tenure, legally speaking, was of course wholly at the will of the owner, but the action of the officers of the Roman treasury began to give it a species of stability. From the end of the 3rd century the names of slaves holding under this tenure were noted in the surveys made for the purpose of taxation, and this action did something to make this kind of tenure more permanent. The freed slaves of the owner probably occupied a similar position on the estate. But in addition to these servile cultivators, there was another class, the "coloni," i.e. free cultivators attached to the estate and incapable of quitting it, paying for their land in services and rent, both being fixed for each estate by local custom. The management of this system was in the hands of officers who looked after the collection of rents, and directed the employment of the labour of the tenants on the part of the estate reserved to the owner. For the estate was divided into two parts, the part let out to the free or semi-servile cultivators, and the part retained in the owners' hands. In the same way on each estate there was the "villa" for the proprietor, and the barracks ("ergastula") where the real slaves were housed, and elsewhere the separate dwellings of the other cultivators. This seems to have been the state of things in France, as in other parts of the Roman empire at the time of the German invasions. In the first two volumes of the series the character of the invasion is discussed, and there and in several essays the author deals with the character of landed property in Germany before the invasion. His conclusion on the latter point is that there is no ground for supposing that any common ownership of land existed in Germany outside the limits of the family. This conclusion is perhaps not unassailable, but the author's attack on Maurer's well-known theory of the mark community in the essay entitled "Le problème des origines de la propriété foncière" (*Revue des Questions Historiques*, April 1889) certainly makes out a formidable indictment against that scholar's theory.

The character of the estate has been described as it existed just before the German invasion. But during the period of conquest and after the conquest is complete the estate can be discovered existing in the same form. The method of cultivation is the same. The estate retains its old name and often its old owner. The new German settlers added, in fact, nothing to the land system they found, and took nothing from it. The manor sprang not from a Teutonic mark community, but from a Roman "domain" under the influence of Roman law and custom. The "Saltus Buritanus" noticed in the essay on the Roman colonies is to all intents and purposes a manor existing in the time of the Emperor Trajan in a province of Africa out of the reach of Teutonic influence. Nor can this estate have been a solitary instance. In one point the theory is open to criticism. It accounts for the existence of the manor court, as will be seen on reference to the chapter on "L'immunité" in the fifth volume of the *Histoire des Institutions*; but it does not account for the peculiar system of cultivation known as the THREE-FIELD SYSTEM (*q.v.*), which is so closely associated with the MANOR in many countries. No allusion to this point occurs indeed in the volumes whose argument has been summarised above.

The fourth and fifth volumes of the series deal with problems of politics and government; in the volume entitled *La Monarchie Franque* the author lays down that during the rule of the Merovingian dynasty the dominant power in the state was the king. He succeeded in fact to the position of the Roman emperor. There was no popular assembly to oppose him, and only the elements of a nobility. The Roman bureaucracy, which remained after the fall of the empire, became his instruments of government. The administration of justice was carried on by the king's officers, and there are only traces to be noticed of the growth of local jurisdictions. Even the financial system remained almost unaltered. The invading Germans had expelled the Roman governors but not their method of government; and there is no authority for tracing to their influence either the popular assemblies of later times or the military system known as feudalism. The history of the origin and growth of feudalism is the subject of the last volume of the series. The sources of this, according to the author, are three in number. In the first place he considers the history of the subordination of land; that is to say, the custom of holding land belonging not to the holder but to a superior. This he traces to the Roman custom of holding land "precariously," *i.e.* not in full property but at the will of the real owner, who permitted what was in the eye of the law an usurpation; this tenure gradually grew to be for the life of the tenant, and was on his death

renewed for his heir on his making a formal request for its continuance. Hence sprang the early form of the "fief." The second source is the relation of patron and client, a relation common to Rome, Gaul, and Germany, which familiarised men's minds with the notion of "fealty." It only needed local independence to complete the scheme of a non-military feudalism. This was supplied by the "immunities" which the Merovingian kings not unfrequently granted. A lord who received such a grant became possessed of full power over his lands. The king's officers could not enter; justice was administered solely by the lord; and the local independence of the district and its complete subjection to its owner followed. The military character of the services rendered was only one phase of the militarism of the period. But military service, historically speaking, is of later growth than feudalism.

The concluding volume of the series deals with the complete establishment of feudalism, and traces the gradual fall of the Merovingian kings before the new organisation of society which they had allowed to grow up. The crown lost its power of legislation, its power of taxation, and its control over the army; and with these the administrative system inherited from the Roman empire also disappeared. With Pepin a new form of monarchy based upon feudalism begins.

Something must be said of the method of study which led the author to his conclusions. The only evidence he accepted is documentary evidence, and to the study of this evidence he brought an unrivalled knowledge of the documents and of their language. Few scholars have ever approached him in knowledge of the variations in meaning through which a word in mediæval Latin may pass. In particular his study of the word "marca" in the essay referred to above is well worth notice. That all his conclusions will stand the test of criticism is hardly to be expected, but the publication of his books has certainly been an epoch in the history of mediæval scholarship.

His life was passed in teaching, first as professor at Strasbourg, and afterwards in similar posts at Paris.

La cité Antique, 1864.—*Histoire des Institutions de l'ancienne France*, vol. i.—*La Gaule Romaine*, 1891; vol. ii., *L'invasion Germanique*, 1891. [First published in one volume in 1875; reprinted, 1877; now republished with large additions.]—Vol. iii. *La Monarchie Franque*, 1888.—Vol. iv. *L'alleu et le domaine rural pendant l'époque Mérovingienne*, 1889.—Vol. v. *Les origines du système féodal*, 1890.—Vol. vi. *Les transformations de la royauté pendant l'époque Carolingienne*, 1892. [Vols. i. ii. v. and vi. were published after the author's death, under the editorship of M. Camille Jullian].—*Recherches sur quelques problèmes d'histoire*, 1885.—*Nouvelles recherches sur quelques problèmes d'histoire*, 1893.

—*Questions Historiques*, 1893. [These two volumes contain reprints of the more important articles contributed by the author to the *Revue des deux Mondes*; the *Revue des questions historiques*; the *Revue historique de droit Français et Etranger*, and other periodicals. Among them are essays on the law of property in ancient Greece, on Polybius, on the island of Chios, and other classical subjects, and an essay on the origin of property in land (translated into English by Margaret Ashley, 1891,—Sonnenschein).]

c. c. c.

FUTURE GOODS AND SERVICES. Terms that have acquired a technical meaning and importance in recent economic theory; primarily in that of the **AUSTRIAN SCHOOL**, and particularly in the writings of v. Böhm-Bawerk, where they connote differentiations of economic phenomena in time; secondarily, in the writings of American economists, where they have begun to connote also the dynamic phases of economic phenomena, for which "time" is a mere abstraction. Future goods and future services must be carefully distinguished from certain other economic factors with which they are often confounded, and they must then be observed in their relations to the phenomena of subjective value, of objective value in exchange and distribution, of consumption and production.

In this article the term "goods" always means those concrete physical objects that render what Böhm-Bawerk has called "material services" through redistributions of matter and energy. "Services" are useful actions, efforts, or changes that are immaterial, personal, or social in character. The same laws govern the values of future goods and future services, and it is therefore quite unnecessary to treat them separately, except when it is desired to emphasise the fact that services are often more transient in useful action than goods. But this is by no means always true. Certain immaterial utilities, e.g. legal rights, may endure through periods of time compared to which the economic life of a vast majority of material goods is insignificant. (See also **GOODS, CLASSIFICATION OF; GOODS, ECONOMIC.**)

Future goods and services are not identical with Menger's category: "goods of the second order," i.e. instruments of production. Not only do future goods include prospective consumers' goods, but producers' goods now existing are not future goods, though frequently so called. Strictly speaking, they are present equivalents of future goods. In accurate analysis we must remember the possibilities of cross-classification. Future goods may be primary—i.e. consumers' goods, or secondary—i.e. producers' goods. Consumers' goods or producers' goods may be present or future.

Future goods comprise all economic goods not now existent or complete, but which, it is practically certain, will be existent and ready for use at any designated future time. They

include all goods in process of production which will doubtless be finished and put in market. As communities provide more adequately for their future, future goods become an increasingly important economic category. They become "as much objects of economical dealing as present goods." They are produced, valued, bought, and sold.

In the market, future goods are of less value than present goods of like kind and number. According to the theory that derives market or objective value from subjective valuations, we have to seek the reason for this phenomenon in the lower marginal utility of future goods. Marginal utility, in turn, is not an ultimate fact, and Böhm-Bawerk names three co-operating causes of the relatively low marginal utility of future goods. These are (1) the better provision for future want; i.e. the reasonable assurance that future want will be more adequately met by supply than present want; (2) men's usual under-estimation of the future; (3) the technical superiority of present goods. The second cause is resolved into three factors; namely (a) imperfect imagination of future conditions, (b) weakness of will, attributable in part no doubt to imperfect imagination, (c) the uncertainty of life. The technical superiority of present goods is the group of circumstances: (a) that a surplus of consumers' goods enables men to spend time in making such producers' goods as tools and machinery; (b) that these in turn co-ordinate natural energies in useful ways, enormously multiplying productive power; and (c) that as these processes take time, the sooner they are begun the greater the gain. It is obvious that human progress tends to correct the under-estimation of the future, and therefore to emphasise the relative importance of (1) and (3) as permanent causes of the under-valuation of future goods. In the view of the present writer, Böhm-Bawerk has not sufficiently developed the underlying connection of the better provision for future want with the technical superiority of present goods, and has therefore failed to discover the ultimate and permanent economic cause of the under-valuation of future goods, and consequently the true cause of interest, in the relatively low cost of production of future, the relatively high cost of production of present, goods. This phase of the question will be referred to again.

The unequal values of present and future goods affect two great classes of transactions. One is the exchange of future consumers' goods, **FUNGIBLES**, for present **CONSUMERS' GOODS**, and the agio takes the form of loan interest. The other is the exchange of consumers' goods for producers' goods of various ranks—mills, machinery, tools, materials in all stages of production, and of labour, both skilled and unskilled. In transactions of this latter kind producers' goods are equivalents of future

consumers' goods and must be valued in terms of such. The dealers are capitalist-undertakers, and the differential value of the present goods which they are constantly exchanging for future goods, though essentially the same thing as interest, is merged with such other elements as gains of speculation, rent of ability, wages of superintendence, etc., in the gross profits of production.

The economic phenomenon here described has found expression in the ambiguous formula that "the value of means of production lags behind the value of finished products." The intended meaning is that the value of means of production equals the value of the future finished products which they will bring forth, and is therefore less than the value of present finished products of like kind and number. In the modern world the phenomena have become exceedingly complicated through a double use of innumerable kinds of goods, which, at any moment, may be devoted to consumption or to the furtherance of production. Since cattle exactly alike will not sell in the same market for different prices simply because some of them are to be kept for breeding and others butchered for beef, the formula quoted above seems to be contradicted. The Austrian reconciliation is through recourse to the doctrine that the value of the whole stock of any commodity which admits of different uses is determined by the marginal use. If there are nine possible uses, present and future, for 500 pieces of goods, in groups of 100 pieces each, only five uses can be actually chosen, and these will be the five of highest utility. The lowest utility of these five will determine the value of the entire 500 pieces. Let this be a utility of present consumption. Then, since the utilities realisable in the future are greater, the pieces devoted to future use may undergo a present discounting of their future value, and yet sell at the same price per piece as the pieces devoted to present use. This explanation is consistent with the intended meaning of the formula that "the value of means of production lags behind the value of finished products" on one condition only, namely, that the future value of finished products to be obtained by means of 100 units of present goods used productively shall be greater than the present value of 100 units of exactly similar goods now used in consumption. The mere "ripening" of the value of so many units of goods productively employed until their future value exactly equals the present value of goods of like kind and number, consumed in present time, does not at all satisfy the conditions of this problem. The alternative is exactly that kind of productivity of capital which Böhm-Bawerk has stoutly denied. Economists generally have not followed him in rejecting the productivity theory of interest, and it would seem that his own "positive" theory, so far from being incon-

sistent with it, is in fact built upon it in a disguised form. Capital invested in productive means must be not only "technically" productive of "more goods," but economically productive of "more value" to realise the following combination, which the modern industrial world does actually present, namely, (a) goods available indifferently for consumption or production; (b) selling for either purpose for the same price in the same market; but (c), if used productively, equal in value now only to the present value of the consumers' goods that they will make available at the end of a production period; yet (d) of less value now as producers' goods than are present consumers' goods, equal in quality and quantity to the future consumers' goods to be brought forth by these given producers' goods at the end of the given production period.

These phenomena of the unequal values of present and future goods affect all the phenomena of distribution. All shares in distribution must be reckoned in terms of present values. This is a principle of fundamental importance, unrecognised in earlier discussions, which compels us now to correct many of the classical formulas. All co-operating parties or factors in production who take their shares in future goods will get, in the normal course of things, at the end of their waiting, a greater quantity of goods of any given kind than can be obtained by those whose needs or desires must be met immediately. Those who can take their pay wholly or in part in producers' goods will in the long run have more to show for their labour than those who must get consumers' goods at once. This, as Böhm-Bawerk says, is the true secret of the dependence of the labourer on the capitalist. It is also the element of truth in the WAGES-FUND doctrine. To the extent that a labouring population is employed on distant results, but is unable to take its pay in the ownership of future goods, must its wages be limited by disposable present goods, the free or remuneratory capital of the English economists. The value of these is the means of measurement of what Professor Clark has called pure capital, since the fund of available value invested in producers' goods must always be measured in terms of present goods. Wages can never exceed the concrete free capital of the older nomenclature except as labourers become capitalists and take part of their reward in the pure capital invested in productive instruments, or in materials in process of advancement towards future consumers' goods. If then, denying the wages-fund doctrine, we affirm that wages are drawn from product and measured by product, we must add that to the extent that our modern production is capitalistic in its methods, wages are drawn from capitalised product and are measured only by product in terms of capital.

So far our account of future goods has adhered rather closely, though not strictly, to the Austrian exposition. The relation of future goods to the theory of consumption and to cost of production has been worked out chiefly by American writers. Professor Patten, who was among the first to point out the importance of present and future in wage theories, has given attention chiefly to the phenomena of consumption. In a discussion of Marshall's doctrine of consumers' rent he denies the possibility of consumers' surplus from producers' goods. For example, we cannot get consumers' surplus from ploughs and from wheat produced by means of ploughs. The value of the ploughs is "imputed" to them by the future consumers' goods, wheat, etc., and their value, in turn, must be converted into the value of present wheat, which alone, therefore, yields a true consumers' surplus.

Of greater importance, however, is Professor Patten's theory of the dynamic action of changes in consumption itself. These affect all values, subjective and objective, and react on production and distribution. Consumption is governed in its evolution by (a) the psychological law that a harmonious combination of many moderate but varied pleasures will make up a larger total of subjective utility than will a few intense pleasures, and (b) the objective fact that, because of diminishing returns on the one hand and the variety of nature's resources on the other, it costs less to enlarge a harmonious group of many moderate pleasures than to intensify a few. The consumption of a progressive community is a progressive adjustment to these conditions. Irrespective of increasing population, it becomes more varied, and the uses of particular kinds of goods are multiplied as they enter into new combinations. Therefore, we have no right to conclude that if future goods of any given kind are more abundant than present goods of like kind, they must be less valuable per unit. Demand for just these goods may increase as fast as supply, or faster, and the ground disappears on which rested the criticism of productivity theories of interest.

Professor J. B. Clark develops this thought even farther. He denies that in one important class of cases—the very class most often appealed to in the Austrian argument—there is any comparison whatever between present goods and future goods of like *kind*. When men save, they are either postponing the consumption of wealth or they are for ever renouncing consumption and converting wealth for all time into producers' goods. The latter only is permanent capitalisation. Postponement of enjoyment, as in provision for future travel, or for an education of culture merely, or for old age, is temporary capitalisation to be followed by decapitalisation. In permanent capitalisa-

tion we certainly do not compare present goods with future goods of like kind only, if any changes in consumption or in methods of production are contemplated, and, in fact, changes of both kinds always are contemplated, and capitalisation would not occur if they were not. Much less do we compare present and future goods of like kind when we merely postpone enjoyment. When the time for consumption comes, we shall have changed subjectively, and the conditions of life will have changed objectively. Our consumption will not be the same that it would be to-day, and, in fact, we do not expect or wish it to be. We deliberately exchange a group of pleasures that we could enjoy now for a different group that we can enjoy only in the future. Therefore the unequal values of present and future goods of like kind and number cannot be explained by subjective comparisons in the mind of the same individual.

If these conclusions are accepted, it follows that the value of future goods is always determined by comparisons of present goods of one kind with future goods of another kind, and that the difference in value per unit between present and future goods of the same kind is a resultant of many such comparisons by different persons. It is, in short, a phenomenon of objective or market value only. The under-estimation of the future disappears from our list of causes of interest, and we have left the purely objective fact that present goods are strictly limited in quantity, while, owing to the technical superiority, or productive potentiality, of present goods, and the progressive development of invention, future goods are relatively abundant. The value of future goods is determined, like any other value in any actual market, solely by the demand for and the supply of concrete goods.

If this is true, the relative quantities of present and future goods ought to be explained in terms of their cost of production. Like all commodities continuously produced, they should be found to have a normal as well as a market value. Cairnes showed that wages are not a cost, but that they correspond to and repay a cost, and but for the cost would fall to zero. In like manner, interest is not a cost, but it corresponds to and repays a cost, and but for the cost would wholly disappear. The attempt to show these relations has been made by the present writer. Future goods being always in relatively abundant supply, for reasons already given, he affirms that their conversion into present goods can always be hastened if desired, thus increasing the relative supply of present goods and diminishing their relative value. But hastened production is more costly than production at a usual or normal rate. It involves overtime or intensified labour, which is labour of diminishing return. This is the

whole significance of the "fatal lapse of time between the beginning and the end of the lengthy capitalist process" that Böhm-Bawerk speaks of. The process can be shortened, but shortening is costly. This extra cost, therefore, normally prevents the lowering of value of present as compared with the value of future goods which otherwise would be possible through an abnormal acceleration of production. The abnormal cost of hastened production is the normal measure of the difference in value between present and future goods and the normal measure of interest.

[For details of the views here presented consult *Capital and Interest*, and *The Positive Theory of Capital*, by Dr. E. v. Böhm-Bawerk, translated by Wm. Smart. A sketch is given in *Quart. Jour. of Econ.*, April 1889, by J. Bonar.—Francis A. Walker, "Dr. Böhm-Bawerk's Theory of Interest," in *Quarterly Journal of Economics*, vol. vi. No. 4, July 1892.—Simon N. Patten, "The Dynamic Theory of Economics,"—President Walker's "Theory of Distribution," in *Quarterly Journal of Economics*, vol. iv.—No. 1, October 1889.—"Cost and Expense," in *Annals of the American Academy of Political and Social Science*, vol. iii. No. 6, May 1893.—John B. Clark, "Capital and its Earnings," in *Publications of the American Economic Association*, vol. iii. No. 2, May 1888.—and "Distribution as Determined by a Law of Rent," in *Quarterly Journal of Economics*, vol. v. No. 3, April 1891.—F. H. Giddings, three articles in the *Quarterly Journal of Economics*, namely, "The Cost of Production of Capital," vol. iii. No. 4, July 1889; "The Theory of Capital," vol. iv. No. 2, January 1890, and "The Growth of Capital and Cause of Interest," vol. v. No. 2, January 1891. The important remark of Professor Clark, that the same individual does not exchange present for future goods of like kind, is from his paper in the *Yale Review*, November 1893.—Consult also the English economists, the elder John Rae. N. W. Senior, J. S. Mill, Jevons, Sidgwick, and Marshall; the Italian economist Loria and the German Dietzel for criticisms; and of the Austrians, Menger, Sax, and Wieser.] F. H. G.

FUTURES. Dealings in "futures" take place in almost every large market. On the London Stock Exchange, transactions are for a settling day, fixed, or to be fixed (see **SETTLING DAY**), and a large proportion of the bargains are made in the expectation, on one side at least, of their outset by a future transaction (see also **OPTIONS**, **PUT AND CALL**). In many kinds of commodities bargains also are made for delivery at future dates, whether delivery may ultimately be taken, or the right thereto be sold. In the United States, dealings in "futures" are the chief feature in the wheat trade. In London, "futures" in silver, tea, coffee, sugar, and wheat are largely dealt in through the London Produce Clearing House, which guarantees to buyers and sellers the due performance of the contracts, bargains being made for delivery at

any time up to six months, against a deposit of 5 per cent of the value (see **MARGIN**). The power to purchase "futures" is sometimes an important part of a manufacturer's arrangements, enabling him safely to take extensive contracts by ensuring a continued supply of raw material at a definite price. On the other hand, a large proportion of such dealings is purely gambling, and upon this ground their suppression by law has been advocated. Besides these objections upon moral grounds, it has been urged that the sale of "futures" has a direct effect upon prices, equal to that of a large increase of supply, and has, in the case of wheat at least, caused a prolonged depression of price beyond the minimum cost of production. (On this last point see *Commercial Gambling the Principal Cause of Depression in Agriculture and Trade*, by C. W. Smith, 1893.)

R. W. B.

FUTURES IN COTTON will supply an example of dealing in "futures." The term is applied to contracts made for future delivery of cotton, transactions of this nature forming by far the larger proportion of business done in the Liverpool market; a fact which is self-evident when we reflect that almost every bale of American cotton imported into Liverpool is hedged by a sale of distant futures, whilst spinners also find this a convenient method of covering forward orders taken for yarns; and speculators, it is needless to add, resort almost entirely to this mode of doing business, involving, as it does, no outlay of capital beyond a margin to be agreed upon at time of contract, or a payment of weekly differences as customary by the rules of the cotton association.

The "future" market is also largely used for "straddling" purposes between Liverpool and New York, when the difference in price between the two markets is such as to permit of a commission being earned by a simultaneous purchase and sale.

Differences, unless otherwise stipulated at time of contract, are settled weekly, through the medium of the cotton **CLEARING** (*q.v.*), the price of settlement being struck each Monday at 11 A.M. and payment exacted on the Thursday following, and some idea of the magnitude of the business may be formed from the fact that in a single week it is estimated £1,500,000 at least has passed through the clearing-house for differences during that period only.

R. C. B.

FYRD was the Anglo-Saxon militia. There was very little taxation before the Norman Conquest, because most of the expenses were defrayed by local obligation. Every freeman was subject to the *trinoda necessitas*, *i.e.* service at his own expense when summoned by the king (*fyrdung*), the repair of fortifications (*burhbot*), and the repair of bridges (*bricbot*).

R. I.

GABELLE. This term, originally applied to any tax upon commodities, was gradually limited to the tax upon salt, perhaps the most odious and inequitable impost in France. Not only did the state reserve to itself the monopoly of the trade in salt, but it actually compelled the purchase of a minimum amount for every individual over eight years of age. This was called the *sel du devoir*. Originally the tax was uniform throughout France, but as time went on the most extraordinary inequalities grew up. The country was divided into five groups of provinces according to the price at which salt was sold by the **GRENIERS À SEL** (*q.v.*). These were (1) the *pays de grandes gabelles*, where the price was 62 francs the quintal; (2) the *pays de petites gabelles*, where the price was 33 francs 12 sous; (3) the *pays de salines*, where it sold for 21 francs 12 sous, and the tax was levied on the extraction of salt from the salt marshes; (4) the *pays redimés*, which had purchased exemption in 1549; (5) the *pays exempts*, which were exempted from the tax by the terms of their union with the monarchy. Many individuals received the privilege of being on the list of *franc-salé*, which included all hospitals, religious communities, and magistrates. The inevitable result of these inequalities was to give rise to a regular smuggling trade, and this in turn to a harsh and expensive system of police, often assisted by the troops. Necker says, "Thousands of men, attracted by the prospect of easy gain, devote themselves to a commerce contrary to the laws. Agriculture is abandoned for a career which promises greater and more speedy returns, and children are trained under the eyes of their parents to forget their duties to the state." The fact was that ever since 1548 the *gabelle*, like the other indirect taxes, had been farmed out to speculative companies. The net revenue from the *gabelle* is reckoned by Necker at 54,000,000 francs. The tax was condemned by all advocates of reform, from Vauban to Turgot, but it was not abolished until 1790. The Gabelle had the effect of seriously diminishing the consumption of salt, which was only half as much per head in the *pays de grandes gabelles* as in the exempted provinces.

[A. Smith, *W. of N.*, bk. v. ch. ii.—Gasquet, *Précis des Institutions Politiques de l'ancienne France*.—Necker, *Compte Rendu*.—Clamagèran, *Histoire de l'impôt en France*. (See also **SALT TAX**; **INDIRECT TAXATION**.)] R. L.

GABLATOIRES, servile tenants, who paid rent either in money or kind in lieu of actual service. Such rent, *gafol* or *gablum*, occurs frequently in Domesday; seven gablatores are mentioned on the manor of Cheddar, part of the *terra regis* in Somerset, as paying seventeen shillings yearly to the king. By the 14th century such commutation was becoming general,

and led to the formation of a class of tenants at money rents (see **GEBUR**).

[Cunningham, *Growth of English Industry and Commerce, Early and Middle Ages*, 1890, p. 160.—Round, *Danegeld and the Finance of Domesday*, in *Domesday Studies*, 1888, vol. i.] E. G. P.

GAËTA, DUKE OF, MARTIN MICHEL CHARLES GAUDIN (1756-1841), born at Saint Denis (Seine), died at Paris. He was placed at the age of seventeen in the office of the ministry of finance. In 1791 he was appointed one of the six commissioners of the national treasury. He resigned office on the breaking out of the Reign of Terror, and refused the portfolio of finance under the Directory, contenting himself with being the general commissioner of the post office, but accepted it after the 18th Brumaire from the hands of the First Consul. He continued to hold this office up to the fall of the empire, and during the Hundred Days. He assisted in the reorganisation of the administration of the system of finance. In this reorganisation the system of the *ancien régime* was taken for a model, of which he was, unfortunately, only too faithful a follower. For he thus recalled to life that spirit of bureaucracy which, while painstaking and order-loving, as we freely admit, was over-exact to a fault, treating the people as if they were children, incapable of understanding and managing their own interests, and especially of foreseeing what would serve those interests best. Absolutely honest and unassuming, acting always with the most perfect good faith, he earned and deserved the respect of the government of the Restoration, which appointed him (he was deputy for the department of the Aisne from 1815 to 1819) governor of the Bank of France in 1820, a post which he held till 1834. He declined a seat in the chamber of peers.

A. C. F.

"He was," writes Napoleon from St. Helena, "an honest and orderly administrator, who knew how to be on good terms with his inferiors and to progress with a demure but steady step. Everything he did and projected from the beginning, he maintained and perfected during fifteen years of a wise administration." In his *Mémoires relatifs à la Révolution, à l'Empire et à la Restauration* (Paris, 2 vols. 1826), Gaëta himself explained the principle which guided him throughout life in the following terms:—"The spirit of order is the first desideratum in financial administration: it applies to everything and embraces both men and things."

In his *Notice Historique sur les Finances de la France* (1818), published to defend his financial administration against attacks from the more ardent among the Legitimists, the Duke of Gaëta states that when he first entered the ministry, the treasury only possessed in cash the miserable sum of 177,000 francs (say

£7080). "The *Assemblée Constituante*, with the best possible intentions, had decreed the ruin of our finances on the day when sacrificing true principles and the warnings of experience to vain abstractions, it had decreed the suppression of all taxes on consumption." In a note (p. 3) he adds that "indirect taxation is one of the *necessary* elements of a system of finance, capable of adaptation to all circumstances and to all wants." He adds (pp. 225 *et seq.*) that on principle and from the first day he assumed office he pursued two main objects: "first, to improve and consolidate (the national) credit by looking carefully after the interests of the creditors of the state; and second, to bring the ordinary revenue to the necessary level by taxes on consumption." . . . He also successfully organised the system of collecting the taxes and the execution of the general land survey (*Cadastré*) by the law of the 15th of September 1807, which is due to him, following in this the principle of the law of September 1791 (see *CADASTRAL SURVEY*). Gaudin ranks as the author of the modern system of French financial administration, acting on the opinion he had expressed in his *Notice historique* (p. 6) that, at the time of the outbreak of the revolution, the national assembly "might easily have ameliorated the older system instead of destroying it." The italics are his own.

Apart from the above mentioned works, the Duke of Gaëta published; *Observations et éclaircissements sur le paragraphe concernant les finances dans l'Exposé de la situation du Royaume présenté à la Chambre des Pairs* (1814).—*Opinion préliminaire sur les Finances* (1815).—*Mémoire sur le Cadastre* (1817).—*Aperçu théorique sur les Emprunts, suivi de quelques observations . . . sur l'ouvrage de M. Ganilh* (1817).—*Observations sur la proposition faite de réduire le crédit pour les travaux du Cadastre* (1820).—*Considérations sur la Dette publique de France, sur l'emprunt et sur l'amortissement* (1828).—*Considération sur l'Exposé des Motifs de la Loi du 17 Mai 1837 portant création d'un fonds extraordinaire pour les Travaux Publics* (1837).—*Des Conséquences du rejet par la Chambre des Pairs du projet de loi concernant la Conversion de la rente 5 per cent* (1840).

[See also *Essai sur la Vie et l'Administration du Duc de Gaëte, ministre des Finances de l'Empire*, by Aug. Portalis (Paris, 1842).] E. ca.

GAFOL, GABEL, or GABLE, "payments in kind or in money, in labour, service in the field defined or undefined" (Gneist, *English Constitution*, translation, 1886, 1, 4). It was the least servile of the incidents of serfdom, paid by the GEBUR or villein, less fully by the cottier (Seebohm, *Village Community*, 1884, 141, 142). Vinogradoff (*Villainage in England*, 1891, 184) considers *gafol* to be an original, not a commuted payment, "the old Saxon rent in money or in kind," but admits exceptions, as in Kent (cp. *GAVELKIND*), where it may be unconnected with any base or villein service (p. 187). The

word occurs in combination, e.g. *gafol-earth*, i.e. ploughing over and above the week-work, *gafol-ale*, etc. Seebohm (pp. 318-317) attempts to trace it to the dues paid by the Roman *coloni*.

[Kemble, *Saxons in England*, vol. i. ch. xi.—Round, *Domesday Studies*, vol. i. p. 182, and *Eng. Hist. Review*, January 1887, p. 103.—Stevenson, *Eng. Hist. Review*, April 1887, p. 336.]

E. G. P.

GAINAGE or WAINAGE. The oxen, horses, ploughs, and other instruments used in carrying on the work of a farm.

[Cowel's *Interpreter*, ed. 1727, arts. "Gainagium" and "Gainage."]

A. E. S.

GAITO, GIOVANNI DOMENICO (at Naples in 17th century); wrote a comprehensive treatise on transactions of credit, in which, like other writers, especially the Roman Sigismondo Scaccia, without openly endeavouring to modify the ideas of theologians and jurists, he proved the lawfulness of interest on money. It is interesting to observe the effort made in it to overcome the prejudice, existing at that time, to consider money as being an unfruitful property, without, however, venturing to oppose this opinion openly.

Tractatus absolutissimus de credito, Venetiis, 1626.

A. B.

GALANTI, GIUSEPPE M. (1743-1799), born at Campobasso in one of the Neapolitan states on the south-east coast, of which in 1781 he wrote a description. His father destined him for the bar, which he gave up early to study literature and rural matters closely, a choice fostered in him by GENOVESI, whom he greatly admired, and on whose death in 1772 he composed *Elogio storico del Sig. Abate Genovesi*.

Galanti was invited by the government in 1786 to write the *Descrizione geografica e politica della Sicilia*. Napoli (translated into French and German, abridged in English). In this work, much esteemed at the time, Galanti expresses his opinions on the means proper to improve the national wealth. Following many Neapolitan writers before him, he, though eclectic, supports mercantilism. In his *Testamento forense*, Venezia, 1806, based on the arguments of Delfico, he supported the abolition of the feudal system on which the crown estates were still carried on at that date, maintaining that the general prosperity would have been more increased by selling or farming them, and agriculture improved by the consequent adoption of better methods. Galanti was a supporter of the single tax on land, admitting indirect taxes only when really needed and not weighing unduly on goods of first necessity; he deplored the existence of privileged classes, exempted from the payment of taxes, for taxes ought to be paid proportionately to property. Writing on population, he developed such sound principles as to be justly considered by Prof. Fornari, *Delle teorie economiche nelle Prov. Napoletane*, vol. ii., the forerunner of Malthus.

A. B.

GALDI, MATTEO (18th century) a Neapolitan jurist. In his lifetime the laws regu-

lating the property in land were much discussed. He was of opinion that these should be as liberal as possible, and that in order to attain the greatest public prosperity, the number of proprietors should be as large as possible in every nation. Every legal institution which tended to prevent the free distribution of a great part of the territory of a nation should be abrogated.

Analisi ragionata del Codice Ferdinando
... Napoli, 1790. A. B.

GALE, AND HANGING GALE. An expression used in Ireland for an instalment of rent. Gale day is the day on which rent is payable.

The word is connected with *Gabelhum*, gavel (see GAFOL). The "hanging gale" is the half-year's rent in respect to which the tenants on many estates were allowed to remain in arrear.

C. F. B.

GALEON. The Spanish name of the ships *flotas y galeones* engaged in the officially authorised trade between Spain and America. Charles V. in 1526 and again Philip II. in 1561 decreed that the whole of this trade was to be monopolised by these *galeones* sailing every year or eighteen months and under military convoy from Seville to Carthage and Portobello or Porto Rico and Vera Cruz. Occasionally a few ships, *navios de registro*, obtained licenses to sail by themselves or from other Spanish ports, but with such delays and formalities that these licenses were almost useless. In America the goods imported from Spain were sold at fairs and at previously fixed prices, which left profits ranging from 100 to 500 per cent. On their journey home, the *galeones* were also bound to unload their cargoes of precious metals in Seville (from 1717, Cadiz). The whole system resulted in an enormous premium to smuggling, and lasted until the middle of the 18th century, when it had greatly declined in importance.

[Colmeiro, *Historia de la Economía Política en España*, ii. pp. 401-421.] E. CA.

GALIANI, FERDINANDO (1728-1787), born at Chieti, south-east coast of Italy. He lived at Naples and became an ecclesiastic and eventually a monsignore. From his youth upwards he showed high intellectual power, and reached high office, being a member of the supreme board of trade at Naples. In 1759 he was appointed secretary to the Neapolitan embassy at Paris, and soon after an envoy. He went to London, where he lived a long time and published his *Dialogues sur le commerce des blés*, Londres (Paris), 1770, which made him known throughout Europe, and drew forth vigorous replies. In 1773 he was recalled to Naples, and employed in high public office, which he filled to the entire satisfaction of the king.

The writings of Galiani were highly useful, especially his work *Sui doveri dei principi neutrali verso i principi belligerenti*, published during the Seven Years' War, during which the kingdom of

Naples stood neutral. He investigated, with much originality, the fundamental problems of economic science, opening the way to its future progress. In his able work, *Della Moneta* (anonymous 1750, 2nd ed. with his name, 1780), he analysed the phenomenon of value, forming a theory which may have a little in common in its details with the other systems known in his time, but differing essentially from them in its theory of the basis of value. Galiani placed this in the concrete utility of single quantities of wealth—a utility which, according to him, is determined by the different degrees of demand; he remarks on the influence of time and the reciprocal influence of demand on value, which, in its turn, influences the former. This theory of the limit of utility forms a complete and regular system in which the several elements are first ascertained and then reduced to one alone. This element is neither labour nor rarity, separately considered, nor even utility itself. According to Galiani, the law regarding normal value is a mixture of several elements, all tending to give the idea of utility in its widest sense, and differently distinguished in degree and demand. Galiani's system has nothing in common with that of Locke and Cantillon, then generally accepted. It anticipates the theories of Jevons and Menger. In the work, *Della Moneta*, he defends charging interest. The chapter on the course of exchange, though imbued with *mercantilist* opinions, and showing some inconsistencies in the remarks on international trade, has great merits. His eight dialogues, *Dialoghi sul commercio dei grani* were translated into French by Diderot, January 1770, and are the most brilliant writings published up to that time in support of practical economics. The author declares himself in them the follower of no school; according to him in the corn trade the only system to be followed is to follow none. As he wrote subsequently in his *Corrispondenza*, the dialogues were never completed, he having intended to add one more (IX.), which was never published. Pecchio, *Storia dell' Econ. pubbl. in Italia*, Lugano, 1819, pp. 95-96, has given copious extracts and a short analysis of the dialogues. In the *Dialoghi*, Galiani does not speak of agriculture as the sole basis of wealth, as the physiocrats do, because several states have territories quite insufficient for their requirements. He praises the edict of 1764, which established free trade in corn in France, but he does not do this through an absolute conviction of the correctness of the theory. Every nation, every age, requires, according to him, different laws; it is absurd to resolve the problems of economical legislation by reference to abstract and absolute principle, because consideration must be had of an indefinite quantity which cannot be determined,—that is man, who may be entirely modified by habits. Many objections were raised to these opinions, and all the *économistes* opposed Galiani. Further, the French government gave MORELLET the task of refuting him. The attempt was published three years later.

In the history of economic doctrines, Galiani has the great merit to have remarked in the 2nd edition of *Della Moneta* (1780) on the great importance of the work of Antonio SERRA, *Breve trattato delle cause che possono fare abbondare i*

regni d'oro e d'argento dove non sono miniere, Napoli, 1613, which every one had unjustly forgotten.

A. B.

GALITZIN, DIMITRI, Prince (1730-1803). From 1765 to 1772 he was Russian ambassador in Paris, where he met on friendly terms QUESNAY and other members of the school of the PHYSIOCRATS. On leaving Paris he occupied the Russian embassy in the Netherlands, and retired to Germany, where he died, after the outbreak of the French Revolution.

To vindicate the memory of his former friends, Galitzin published, in 1796, at Brunswick, a book entitled *De l'Esprit des Économistes ou les Économistes justifiés d'avoir posé par leurs principes les bases de la Révolution française* (The spirit of the Economists, or the Economists not guilty of having laid, by means of their principles, the foundation of the French Revolution).

E. CA.

GALLATIN, ALBERT (1761-1849), an American statesman and writer, was born at Geneva in Switzerland, and emigrated to the United States in 1780. He was active in the state (Pennsylvania) and federal legislatures from 1789 to 1801, and became secretary of the treasury in 1801. He served in that capacity with distinguished success until 1813. In 1814 he took a leading part in negotiating the treaty of Ghent, by which the war between the United States and Great Britain was brought to an end. From 1816 to 1823 he was minister to France, and in 1826-27, minister to England. In the later years of his life he was president of a bank in New York, where he died. His character was singularly pure and noble, and his career marked by unflinching public spirit combined with rare good sense.

Gallatin's official writings on economic and financial subjects are voluminous, consisting of his reports as secretary of the treasury, and of other state papers and speeches. All are marked by sound judgment and perfect accuracy of statement, and are material of high value on the industrial and financial history of the United States. The same qualities appear in his un-official writings, a list of the more important of which is subjoined. In the two pamphlets on currency and banking, published in 1831 and 1841, he gave sketches of the currency history of the country, which are the best sources of information on that period; and he urged strongly the maintenance of specie payments. It is noteworthy that the function and importance of deposit banking as virtually supplying currency received adequate recognition at his hands. In the memorial which he drew up in 1832 on behalf of a free-trade convention, he presented with force the argument in favour of free trade, showing in his treatment of the subject signs of the influence of the Ricardian school.

Gallatin's life has been fully written by Mr. Henry Adams (*Life of Gallatin*, Philadelphia,

1879). The same author edited at the same time three volumes of Gallatin's works, the third of which contains most of those enumerated below, and gives also a complete list of all Gallatin's public and private writings. The more important of his unofficial writings are:—*A Sketch of the Finances of the United States*, New York, 1796. — *Views of the Public Debt, Receipts, and Expenditures of the United States*, Philadelphia, 1800. — *Considerations on the Currency and Banking Systems of the United States*, Philadelphia, 1831. — *Memorial of the Free Trade Convention*, New York, 1832. — *Suggestions on the Banks and Currency of the several United States, in reference principally to the suspension of specie payments*, New York, 1841.

F. W. T.

GAMBRINI, FRANCESCO (early 19th century), born at Asti in Piedmont.

In his work, *Delle Leggi Frumentarie in Italia*, 1819, Gambrini defended free trade in corn and free trade in general, opposing the system of protection to manufactures by forbidding the export of raw materials and imposing heavy duties on the import of manufactured articles. Nevertheless he considered a protective system justified if it prepared domestic manufactures against a time when they could compete with foreign countries. *Osservazioni sulla proibita estrazione della seta greggia dal Piemonte* (Racc. di opere di Econ. Pol. di Aut. Piem., p. 144).

A. B.

GAME LAWS. These laws are an artificial arrangement for the purpose of securing to owners of land the game on their estates, which, by the common law, is not, while living, capable of being property. In this respect the common law is founded on the civil or Roman law. In the view of Roman lawyers, wild or undomesticated animals were *res nullius*, the property of no one, until killed or captured, when they became the property of the captor, no matter on whose land they might have been taken (Inst. II. 2). If they were caught and confined they became property only so long as they were in actual detention, but if they recovered their liberty they again became *res nullius*. Even if tamed, animals *feræ naturæ* were the subject of property so long only as they were either on the owner's estate, or retained an *animus reverendi* to it, and if that did not exist, they became subject to the right of appropriation as if wild. These rules were carried still further by the Anglo-Saxons, whose presumption in favour of equality of rights led to the prohibition of keeping wild animals in confinement for purposes of pleasure, because by so doing they were abstracted from the common right of all to kill them. But the Norman love of sport, and their introduction of the feudal principle, gave a new development to these doctrines. Game continued to be in law not a subject of property, but the right to pursue it became a privilege vested only in the landowner, and pre-eminently in the sovereign as lord paramount. In particular the right to confine animals of

chase within certain bounds was limited to the sovereign and to those private individuals on whom he bestowed the right—by grant of privilege of a “forest,” in which the forest laws prevailed; of a “chase,” where game might be preserved, but without protection of the forest laws; or a “park,” in which game might be confined by a fence. The “forest laws” were a code established by the arbitrary decree of the Conqueror and his immediate successors, which inflicted fines, mutilation, and death on all who might hunt within the limits in which it applied. The severity of this code caused deep murmuring, and it was restrained both by the Great Charter and by the *Charta de Foresta* (1217). (See FORESTS, MEDÆVAL.)

A series of game laws gradually took the place of this code of privilege, and these were consolidated by the Night and Day Poaching Acts, 9 Geo. IV. c. 69, 1 & 2 Will. IV. c. 32, and 2 & 3 Will. IV. c. 68, which now form the principal enactments framed for preservation of game. These still proceed on the basis that game is not property, and therefore the taking of it alive is not theft. But they convert trespass, which by itself is not criminal, but only gives room for a civil action for damages, into a criminal offence, if it is for the purpose of taking game. The offence during day is punishable only by fine, but the taking of game by night is punishable by imprisonment with hard labour for three months, six months, and two years, or even penal servitude for seven years for a first, second, and third offence. There are further penalties for aggravation by resistance, etc., and the 7 & 8 Vict. c. 29 applies the rule to highways. The game thus protected by night are hares, pheasants, partridges, grouse, heath or moor game, black game (these two latter are the same), and bustards. The Day Act applies, in addition to these, to deer, roe, woodcock, snipes, quails, landrails, wild ducks, and conies. The 25 & 26 Vict. c. 114 entitles policemen to apprehend and search any person suspected of having game in his possession. In addition to these restraints it was formerly unlawful for any one to kill game, even on his own ground, unless he were possessed in England of an estate of £100 a year (22 & 23 Car. II. c. 25), and in Scotland of a “ploughgate” of land. But the necessity of a qualification was abolished by 1 Will. IV. c. 32, and in its place was substituted the requirement to take out a licence. The present statute is the 23 & 24 Vict. c. 90. The 11 & 12 Vict. c. 29 relieved occupiers of this obligation as regards the killing of hares, and as regards both hares and rabbits the Ground Game Act, 1880, declares that the tenant of lands shall have a right of killing which he cannot contract himself out of. There is also a close time appointed by 13 Geo. III. c. 54, during which the killing and selling of game is illegal.

Such are the leading provisions which constitute the code of game laws. As there is no moral question involved in their principle, whatever may arise out of their exercise, the policy must be judged on grounds of expedience and public advantage. Two arguments may be stated in their favour. In the first place they adapt to modern conditions ancient rules of law which have ceased to be applicable. In a sparsely-inhabited country the doctrine that wild animals are no man's property is reasonable. But when every inch of ground has its owner, and every plant is private property, it is pedantic to affirm that animals which live and die on private land, and are wholly fed on private property, become public because they have the power of flying or leaping over the fences which separate one private property from another. Common sense would suggest that they should be recognised as part of the property of the landowner on whose territory they are for the moment, and that their being taken by another person is as much stealing as the appropriation of a sheep or turkey. But in the second place there is the plea in favour of the game laws that by encouraging sport they encourage the residence of owners on their estates; the advantage of which to the community cannot be disputed. But these arguments are met by others of undeniable force. Human nature has not confined the love of sport to the breasts of landowners, or of rich men who can hire their rights. It exists as deeply in the hearts of poor men; and no enactments can convince them that its indulgence is a crime. Further, the excessive preservation of game, which the game laws foster, makes poaching a very profitable pursuit. At the same time the valuable animals thus multiplied are somewhat in the position of a shopkeeper's goods exposed outside his door instead of within his window: they are not in a place of safe custody, watched over by regular attendants, so that the temptation to take them is enhanced by apparent negligence and the prospect of carrying them off without detection. It is against public policy to foster in this manner temptations to crime, and most of all to offences which are artificially created by law. The impolicy is heightened by the fact that those yielding to the temptation are often brought into situations where in self-defence they commit murder or are themselves murdered.

The economic effects of preservation of game have been often exaggerated on both sides. The advocates of the system urge that a large amount of food is produced and a great deal of employment given. The opponents insist that crops are destroyed, land thrown out of cultivation in order to form preserves, and agricultural employment diminished. Excluding deer forests from view for the present, the mischiefs on both sides have been practically much re-

duced in amount by the effect of recent agricultural depression. This fact has given to tenants in general an increased power of making their own conditions, among which moderation in the preservation of game is not one of the least essential. There are probably not now many farms in which any considerable amount of damage to crops arises from game. The actual preserves are mostly within parks, partly grazed by cattle and sheep; and in woods, which under present circumstances return as much profit from timber as the land would if under cultivation. Nor can any reasonable person think it desirable that sylvan scenery should be utterly abolished in England, even if a small addition to the supply of human food were thereby attained. The number of keepers is also not greatly less than the number of agricultural labourers would be.

The case of deer forests (which are really treeless tracts of mountain heath) is, however, peculiar in its circumstances. If the deer were limited to the higher ranges, in which culture is unprofitable, the small number of sheep and cattle which they would displace would be scarcely worth computation. But of late years rich strangers have offered tempting rents for immense ranges of country, including a proportion of fertile glens, with the view of driving out the existing population on the pretence that their presence frightens the deer away. The pretence is unfounded, for deer soon become reconciled to the sight of those who do not molest them. But even if it were true it would be contrary to sound national policy to allow a wide district to be depopulated for the sake of yielding sport to a rich man. A royal commission in 1895 investigated the extent of land suitable for crofter holdings or common pasture, which it stated at 1,700,000 acres, but there does not appear to be any statement of the total area comprised in deer forests.

[Rich. Griffiths Welford, *The Influences of the Game Laws*, 1846 (Extracts from Evidence before House of Commons Committee, Speech of Bright, etc.).—Shaw Lefevre, *Freedom of Land*, 1880.—*Report of Highlands and Islands Commission*, 1895.

J. B. K.

GAMING CONTRACTS. A gaming or wagering contract "is one by which two persons professing to hold opposite views touching a future uncertain event mutually agree that, dependent upon that event, one shall receive from the other, and the other shall pay or hand over to him, a sum of money or other stake; neither of the contracting parties having any other interest in that contract than the sum or stake he will so win or lose, there being no other real consideration for the making of such contract by either of the parties." (Justice Hawkins in *Carlill v. Carbolic Smoke Ball Company* (1892) Queen's Bench 484.) Contracts of this description are declared to be

null and void by an act passed during the present reign (8 & 9 Vict. c. 109, p. 18). Notwithstanding this act it was held that a betting agent who had paid the amount due by his principal on the loss of a bet was entitled to recover the same from the latter (*Read v. Anderson*, 10 Queen's Bench Division 100; 13 Queen's Bench Division 779), but this indirect recognition of betting transactions has lately been set aside by the Gaming Act of 1892, which enacts that no action shall be brought to recover any sum of money paid in respect of any gaming or wagering contract. The subject of gaming contracts has recently been discussed with reference to the "missing word competitions" organised by certain newspapers, which were held to be illegal, as the result did not depend on skill and judgment but upon mere chance (*Barclay v. Pearson*—1893—2 Chancery 154). The principle of the statute against gaming and wagering contracts was, to a certain extent, already recognised by the statute of 14 Geo. III. c. 48, which forbids the insurance of a life in which the insurer has no interest, and which is still in force.

Much discussion has taken place both in England and abroad on the question whether certain time bargains on the stock exchange and in the produce markets are to be considered as partaking of the nature of wagers, and the result of the decisions seems to be that a contract is not enforceable where it can be proved that it was not the intention of the parties to deliver or receive a certain quantity of securities or produce at a certain price, but that the payment of the difference between the price at which the bargain was made and the market price at the time fixed for the completion of the bargain was the sole object of the transaction; in the absence of such proof the parties must be presumed to have intended a real sale (*Grizewood v. Blane*, 11 Common Bench 526; *Thacker v. Hardy*, 4 Queen's Bench Division 685—see also the decision of the German *Reichsoberhandelsgericht*, vol. 6, p. 224, and of the German *Reichsgericht Entsch. in Civilsachen*, vol. 12, p. 16, and vol. 30, p. 214).

In France time bargains are not always considered gaming contracts (see the decision of the Court of Appeal at Dijon, dated 18th May 1891, reported *Dalloz Recueil périodique*, 1891, II. 384) (cp. also *LOTTERIES*). See Vercamer, *Étude Historique et Critique sur les Jeux de Bourse et Marchés à Terme*, Paris, 1903.

E. S.

GANGS, AGRICULTURAL, also called "public gangs," are to be distinguished from "private gangs," organised by the farmer himself who employs them, and superintended by one of his own men who works with them. The public gangs are engaged by an independent gang-master, who makes his own terms with the women or boys who compose them, and sees a certain amount of agricultural work executed for a farmer, who pays by the piece. The system is to be found throughout the Fen district. In 1865 it existed in the counties of

Cambridgeshire, Huntingdonshire, Lincolnshire, Nottinghamshire, Norfolk, and Suffolk, and was the direct result of the enclosure of wild land without providing an adequate number of cottages for resident cultivators. This enclosure went on with great rapidity in the two last decades of the reign of George III., and, combined with the unreformed poor law, which rated the parish rather than, as now, the union of parishes, and therefore discouraged landowners from keeping cottages, lest, as was said, they should become "nests for beggars' brats," made it necessary for occupiers of land to look elsewhere for the labour they needed. The Poor Law Union Chargeability Act (1865) altered the condition of affairs to a certain extent, but the expenses of cottage-building and repair have partially replaced the evil then removed. The moral evils to which these gangs led, particularly in a part of England which, being exceptionally free from fences or hedges, admitted of a strict look-out being kept by the culprits against observation, and the physical ruin caused to the employees, were so great that in 1865 Lord Shaftesbury, supported by the then Bishop of Lincoln (Dr. Jackson) and Earl Granville, carried an address from the House of Lords to the Queen for including agricultural child-labourers in the scope of inquiry by the children's labour commission, appointed in 1862, and then sitting. They reported in 1867 that under the public gang system the payment of children according to their age and abilities, and the adjustments of work to their powers, were studied to a great nicety. There were, however, many children employed far too young, and the distances they had to travel on foot led to appalling cruelty. The preponderance of evidence as to a well-regulated system, however, showed that the exercise was good for the health of the elder children, and many medical men said the same also of the effect on the women. On the other hand the gross immorality and general coarsening of character, the obscenity and uncleanness grafted on the young women by the irregularity and vagrancy of the life, were testified to almost universally by labourers, farmers, and ministers of the Gospel. The report of the commissioners startled the public with its revelations. The result was the passing, 20th August 1867, of an act which forbade the employment of any child under eight years old, of any female in the same gang with males, and since 1894 of any female under a male gang-master unless a licensed gang-mistress were also present. Gang-masters must be licensed by district councils, and may not hold a liquor license. The distances to be travelled on foot by the gang are to be fixed by the councils, and each license must be renewed every six months. These enactments have been made more stringent by the Education Act 1870, which forbids the employment of any child under the age of ten, or under fourteen

without a certificate of school proficiency. The work done with the gang varies with the different months, and ceases during harvest time. It consists principally of weeding, picking twitch, singling turnips, gathering stones, spreading manure, setting potatoes, selecting seeds. The advantages of the system are the training of the young to agricultural work, the securing of occasional extra hands for the farmer, and of extra wages for the cottage home, and in the case of the boys at any rate, the healthy effect of outdoor exercise. What disadvantages remain since the regulation by the act of 1867 are the usual mischiefs arising from the herding of twenty to thirty children together, and their possible subjection to an excessive amount of labour where it is the interest of their employer to "drive" them too fast; the danger to women's health in particular, from cold and exposure, and strain, and the harm arising to their homes by their absence; and possibly the discouragement of adult male labour by the competition of the gangs. Happily the general improvement in education and refinement among agricultural labourers' families is gradually causing all women, except widows who have no breadwinner, to refuse such labour, the conditions of which are quite unlike the annual hiring of whole families to work together, as in Northumberland. When, however, the councils really exercise their right of choice, and appoint as gang-master only a man who is at once skilled in the treatment of land, firm in command, and gentle in discipline, gangs seem to form a basis for just that technical training which is needed in our rural districts. The transference of the powers of licensing from justices of the peace to District Councils, act of 1894, has not, however, revived the waning popularity of these gangs. Whereas in 1894 in Norfolk alone there were 21 licensed gang-masters and 14 gang-mistresses, returns in 1909 prove that there are now only 6 gang-masters and 3 gang-mistresses in that county. The Rural District Council of Wisbech, on the other hand, where fruit-growing is the special industry, has licensed 4 gang-masters and 3 gang-mistresses. This, however, is an exceptional case.

[For much valuable evidence, see *Children's Employment Commission*, sixth report, 1867; for the history, Hodder's *Life of Lord Shaftesbury*; and for references Fred Clifford's *Agricultural Look-out*, p. 296.—Thorold Rogers, *Six Centuries of Work and Wages*, p. 511.—Prothero's *Pioneers of English Farming*, p. 225; comp. "Sachsengängerei" in *Jahrb. für Gesetzgebung*.—Kebbel, *Agricultural Labourer*. For private gangs, see *Children's Employment Commission*, appendix part ii., Fourth Report, 1870.] H. L. W.

GANILH, CHARLES (1758-1836), a French economist and financial writer, was born in Allanche (Cantal) and moved early to Paris. During the period of the Revolution and the

subsequent rule of Napoleon he held various public offices.

He was a mercantilist with considerable modifications, due no doubt largely to his extensive acquaintance with the economic literature of his own time, of which he wrote a history, probably his most important work.

Among his writings were: *Essai sur les revenus des peuples depuis l'antiquité* (1806).—*Des systèmes d'Economie politique* (1809).—*Réflexions sur le budget de 1814* (1814); *Théorie de l'économie politique, fondée sur les faits recueillis en France et en Angleterre*, etc. (1815).—*Considérations générales sur la situation financière de la France en 1815* (1815).—*Considérations générales sur la situation financière de la France en 1816* (1816).—*De la législation, de l'administration et de la Comptabilité des finances de la France depuis la restauration* (1817). E. C. K. G.

Ganilh also wrote a *Dictionnaire analytique d'Economie politique*, published at Paris and Brussels 1826. This work is very restricted both in its range of subjects and in its method. *Exportations* has only two pages allotted to it, while *Demande* and *Offre*, which form two separate articles, have scarcely more than one page between them. Perhaps the main use of the volume to the modern reader is to remind him of the subjects most under public notice at the time when it was written. McCulloch refers to this book slightly in his *Literature of Political Economy*.

GARBLED COIN. A term used by bankers to indicate coins which have been sorted out from those in general use. To "garble" coin means to select from a number of coins those pieces which are required for a particular purpose, such as, for instance, to melt into bullion or to send to a mint for recoinage. F. E. A.

GARDINER, OR GARDNER, RALPH (b. 1625), son of Devereux Gardiner of Newcastle-on-Tyne. His father appears to have been an attorney, but failing in this profession, he became writing master at Queen Elizabeth's Grammar School, Newcastle. In 1650, Ralph Gardiner was established as a brewer at North Shields, and so infringed the monopoly of the Company of Brewers and Bakers of Newcastle. He maintained that the charters which conferred their privileges were contrary to the statute-law of the kingdom, and therefore of no authority. Throughout his life he carried on a struggle with the companies in defence of this principle. In 1650-51 the bakers and brewers warned him to cease brewing and brought several actions against him. Gardiner, however, took no notice of them, and in August 1652 he was arrested, "actions being laid for nine hundred pounds, when twenty pound could not be recovered, and he kept locked up in a prison, from all comforts, in a tower above 36 foot high." His bail was at first accepted, but afterwards refused, and he was not allowed to defend his own cause. In February 1653 he escaped from prison; in the following August he was

again arrested by the constables of Newcastle corporation, but rescued by the sailors. Shortly afterwards he was imprisoned, and on 29th Sept. 1653 he addressed to parliament a petition which was referred (5th Oct.) to the committee on trade, and (18th Oct.) ordered to be taken into consideration on 15th Nov. The mayor and burgesses of Newcastle, however, asked for a delay of fourteen days, which was granted; but on 18th Nov. many of the witnesses were examined. On the application of Samuel Hartlib, solicitor to the corporation, proceedings were deferred until the 13th Dec. Unfortunately for Gardiner, Cromwell dismissed the long parliament on 12th Dec., and so his case was not heard. He was at this time still in gaol, but shortly afterwards appears to have regained his freedom. On 15th Dec. 1656 a committee of the common council was appointed to consider his charges against the corporation. A certain Ralph Gardner, hanged at York for coining on 30th March 1661, has been identified with the subject of this notice. But there can be no foundation for the charge, for Gardiner was still carrying on his business in 1662-63.

Gardiner published *Englands Grievance Discovered in relation to the Coal Trade; the tyrannical oppression of the Magistrates of Newcastle; their Charters and Grants; the several Tryals, Depositions, and Judgments obtained against them*, etc., London 1655, 4to. Much of this work was written in prison. It contains much useful information on the Newcastle coal trade and the conservatorship of the Tyne; but it is chiefly valuable as a record of the relations between the exclusive corporations of the 17th century and the private trader. *The Plea and Defence of the Magistrates of Newcastle against the allegations of Ralph Gardiner, as exhibited by him before Parliament in 1653*, published in 1848 in vol. iii. of Richardson's Reprints of Rare Tracts. *Englands Grievance*, etc. was republished in 1796, and again, at North Shields, in 1849, when a life of Gardiner and copious notes were added.

[Life of Gardiner in the North Shields edition of *Englands Grievance*.—*Memoirs of Ambrose Barnes* (Surtees Society), pp. 215, 369.]

W. A. S. H.

GARELLI DELLA MOREA, GIUSTO EMANUELE (died 1893), an economist and juriconsult, and professor at the university of Turin; an able writer, well known in Italy for his school compendiums. He supported liberal principles and the theories of the classical economists.

His most important works are *Principii di Economia Politica*, Roma, 1881, 2nd ed.—*Scienza delle Finanze*, Torino, 1888. A. B.

GARFIELD, JAMES ABRAM (1831-1881) was born in Orange, Ohio. He entered political life in which he rapidly advanced, and was elected president of the United States in 1880; he was assassinated while in office. His speeches, which reflect the economic opinions of the Republican party between the Civil War and

1880, have been collected: *The Works of James Abram Garfield*, edited by Burke A. Hinsdale, 2 vols., Boston, 1882. Garfield had a special interest in the success of the ninth (1870) census, for which see his *Speeches*, 6th April and 16th December 1869. He also contributed an article on the "Census" to the first edition of *Johnson's New Universal Encyclopedia*; republished in *The Works*, etc., vol. ii. pp. 185-217. The same subject, *The American Census*, is treated in a paper read before the American Soc. Sci. Assoc., published in *Transactions*, No. 2, 1870, pp. 31-55, also more exhaustively in *Report of the Committee on the Ninth Census*, House of Rep. 41st Cong. 2nd Sess., 18th January 1870, pp. 120.

D. R. D.

GARNIER, COMTE GERMAIN (1754-1821), was born at Auxerre and died at Paris. Up to the date of the revolution he had given no sign of being the economist he afterwards became. An Anacreontic poet, he was well known through his society verses, some of which are among the classics of that order of poetry. It was not till 1790 that he began life in earnest. He declared himself a warm supporter of the monarchy, and in that character won the confidence of Louis XVI., who offered him office, which he declined to accept. After the 10th August 1792 he emigrated to Switzerland, and did not return to France till 1795. A year later he published his *Abrégé des principes de l'économie politique*, 1 vol. 12mo, a work which, considering its date, is not without merit. His adhesion to the *coup d'état* of the 18th Brumaire gained him the prefecture of the departments of Seine and Oise, a post which he exchanged in 1804 for a seat in the senate; and he was president of that body from 1809-1811. We need not dwell on other official posts which he held; these, though lucrative, were rather dignified than laborious. It may be mentioned that he employed the time which they left at his disposal in his favourite studies of economics and finance. He was thus led to publish in 1805 his translation of Adam Smith's *Wealth of Nations*, 5 vols. 8vo, the best in the French language. It should be added that a second edition of this translation appeared in 1822, 6 vols. in 8vo, one volume being notes, the object of which is to refute Adam Smith from the point of view of the physiocrats. A third edition was published by Guillaumin, under the care of Adolphe Blanqui and of Eugène Buret, 2 vols. gr. in 8vo, 1843. Garnier's feelings of gratitude towards the imperial regime did not hinder him from voting in 1814 for the deposition of Napoleon I. This led to his being appointed a peer of France by Louis XVIII. He held aloof during the Hundred Days, and was, in consequence, appointed a minister and a member of the council of state as soon as the king returned to France. The empire had made him a count; the restoration made him

a marquis. Justice to the memory of Garnier requires us to remember that he defended free trade in corn, and the freedom of the press in the chamber of peers. The other works of Garnier did not rise to the level of his translation of Adam Smith; though interesting, considering the time when they were written, they did not maintain the reputation which that work had won for him. The following are the titles of the most important: *Théorie des banques d'escompte*, 1806, pamphlet, 8vo, and a *Histoire de la monnaie*, tracing this subject from the earliest ages to the time of Charlemagne, 2 vols. 8vo, 1818. This last work was composed by putting together various papers read at the Institute in 1817 and 1818. As a peer of France, he wrote several reports, ephemeral in character, dealing with subjects of the day.

A. C. F.

GARNIER, JOSEPH (1813-1881), was born at Beuil (*Alpes maritimes*) and died at Paris. Sprung from a family engaged in agriculture, who were comfortably off, he made his way to Paris a short time before the revolution of 1830. He was on the point of entering the banking house of Jacques Laffitte, when, being warmly received by Adolphe Blanqui, who had just taken in hand the direction of the *Superior School of Commerce*, founded in 1820, he determined to enter that model institution, in which he was successively pupil, secretary to the governing body, assistant master, and finally professor. His energy led him to seek a wider field, and he became a contributor in 1835 to the *National*, managed at that time by Armand Carrel, and the scientific bulletin of that journal was entrusted to him. He also contributed, between 1835 and 1839, to the *Dictionnaire du commerce et des marchandises*, published by Guillaumin. He continued his contributions to this work, which became in 1861 the *Dictionnaire universel du commerce et de la navigation*. He attended regularly the lectures of Blanqui in the *Conservatoire des arts et métiers*, and reproduced the course with the assistance of Ad. Blaise (of the Vosges) between November 1836 and August 1838. They formed three volumes 8vo of a collection the fourth volume of which was entirely from the pen of his fellow-labourer. After this he established in 1838 a technical school of trade and manufactures. He had, however, no special aptitude for this work, and on it he expended, fruitlessly, six years of his life. The failure of this effort weighed heavily, from a pecuniary point of view, on the years which followed. But Garnier set himself with courage and determination to wipe out all traces of this unsuccessful step. He returned to his favourite occupations, and in November 1842 founded, with the assistance of other rising economists, the *Société d'économie politique*. In 1843 Garnier commenced a course of lectures on political economy at the

Athénée (rue de Valois), an institution similar in character to the existing polytechnic and philotechnic associations in France.

After this date the productions of Garnier's pen were numerous. These works were of various forms, some being his own individual productions, while some were written in concert with others; but all of them equally were devoted to the explanation of the theory or the practical application of political economy. He edited the *Annuaire de l'économie politique et de la statistique*, which had been established by Messrs. Guillaumin in 1844, from that year till 1855. In 1845 he became the principal editor of the *Journal des économistes* (established in 1842), which post he did not quit till 1855, resuming it in 1866 and retaining it thenceforward till his death. In 1853 he undertook the management of the *Nouveau journal des connaissances utiles*, but gave it up in 1860. We have thus described the principal works which Garnier undertook in connection with others in the course of his busy literary life. We will now revert to those which are exclusively personal to himself. He published, in 1845, the 1st edition of his *Éléments d'économie politique*, the title of which, after the 4th edition in 1860, was altered to the *Traité d'économie politique*, now in its 9th edition (1889). This work alone would have made the name of Garnier famous. It forms in reality an encyclopedia of economic science; methodical order and deep knowledge of the subject being alike conspicuous in it. And it should be added that the author has shown a perfect power of appreciating those opinions which are opposed to his scientific convictions. Garnier grafted on this treatise other works more or less distinctly connected with it. Thus he wrote his work *Du principe de la population* (1857), the 2nd edition of which appeared in 1885 after the writer's death; *Les éléments des finances* (1858), which was developed, after the 2nd edition (1862), into *Le traité des finances*, the 4th edition having been published in 1883, also after his death; followed by *L'abrégé des éléments de l'économie politique* (1859), a very succinct compendium of his great treatise. This had reached in 1884 its 6th edition. His last work was *Notes et petits traités* (1865), a collection containing among other things the 3rd edition of his *Éléments de statistique*.

It was Garnier to whom Guillaumin entrusted in 1845 the work of annotating his edition of the *Principles of Population* by Malthus. In 1848 Garnier also collected in one volume all the speeches made and the opinions expressed on the subject of the *Droit au travail*, a point of doctrine dear to the socialists. Garnier was able to prove, by a simple and impartial reproduction of the opposite opinions expressed concerning it, that there was no sound basis for

this doctrine. Besides these works his *Traité complet d'arithmétique théorique et pratique*, the foundation of which was laid when he commenced work in the school of Blanqui, bears testimony to his constant desire to be of service, in however humble a manner, to the cause of commercial teaching. This work reached its 4th edition in 1887. In 1846 a professorship of political economy was established for him at the *École des ponts et chaussées*. He held this till his death, as he did also the similar professorships at the *École supérieure de commerce*, at the *École commerciale de l'Avenue Trudaine*, and at the *Collège Chaptal*, etc. Garnier's reputation was European. Several of his writings, especially his most important work, his *Treatise*, were translated into Italian, Spanish, and into Russian, and are employed as the basis of economic teaching. He became, 24th May 1873, a member of the Institute (*Académie des sciences morales et politiques*), in succession to Baron Charles Dupin, and in 1876 the department in which he was born elected him a senator. During the last year of his life he became, by seniority, the president of the *Société d'économie politique* without giving up the duties of permanent secretary, an office which he had held since its establishment in 1845.

A. C. F.

GARNISHEE. When a judgment recovered by a creditor against a debtor remains unsatisfied and a debt is due to the debtor from a third party, the creditor can obtain an order from the court requiring the third party to show cause why he should not pay the debt to the creditor. The third party is called the "garnishee" and the order a "garnishee order."

[*Rules of the Supreme Court*, Order xlv.]

J. E. C. M.

GARRATI, MARTINO (c. 15th century), born at Lodi, near Milan. He studied under Bartolo da Sassoferrato, the ablest jurisconsult of his time (1313-1359), and was the best lawyer and scholar among his pupils. He wrote on "Money." Cossa gives the date as 1438.

M. Garrati's dissertation was printed with similar treatises in the compilation *De Monetis*, made by M. Boyss (1574), and R. Budelius (1591), and by G. Tesaurio (1609).

"All these writers begin by showing a lively appreciation of the intrinsic value (*bonitas intrinseca*) of coins, which leads to an energetic description of the economic disasters involved in their debasement, and to urgent protests against such practices addressed to the heads of states. But after all they are sure that the value of coins is attached to them by arbitrary enactment (*valor impositus*), and end by defending in cases of necessity a resort to the device of debasing the currency."—Luigi Cossa, *An Introduction to the Study of Political Economy*, 1898, tr. by Louis Dyer, M.A., p. 170. A. B.

GARVE, CHRISTIAN (1742-1798), was appointed in 1768 extraordinary professor of philosophy in Leipsic; owing to his bad health he resigned this office in 1772, and retired to Breslau, his native town, where he resided until the time of his death.

Garve published in 1794-96 the first good German translation of Adam Smith's *Wealth of Nations*, besides several other translations, viz. of Cicero, *De Officiis*, Macfarlane's *Inquiries concerning the Poor*, Aristotle's *Politics*, and Paley's *Moral and Political Philosophy*. He was very fond of translating, and used to say that his own thoughts were only excited when he commented on the thoughts of other writers.

Garve's original (economic) writings comprise various essays on the character of the German peasantry and their relation towards the landlords (*Ueber den Charakter der Bauern und ihr Verhältniss gegen die Gutsherren*, Breslau, 1786), on the relation between moral philosophy and politics (*Abhandlung über die Verbindung der Moral mit der Politik*, 1788), on literary, moral, and social subjects (*Versuche über verschiedene Gegenstände aus der Moral, der Litteratur und dem gesellschaftlichen Leben*, Breslau, 1792-1802), and descriptive contributions on the spirit, character, and government of Frederick II. (*Fragmente zur Schilderung des Geistes, des Charakters und der Regierung Friedrichs II.*, 1788-91).

Garve was a great admirer of Scotch philosophy and Scotch philosophers; he declares HUTCHESON to be a really great philosopher, and FERGUSON'S and SMITH'S books to be "real masterpieces"; still, in accordance with his own views "on the practical dangers of all general maxims," he states his opinion that several of Smith's generalisations only apply to England and France. A man of a quiet and evenly-balanced temper, Garve was adverse to all sudden reforms; for the improvement of the condition of the German peasantry, he expected more from the better and higher education of the landlords than from sweeping state measures. He distinguishes three stages of industrial development: in the first, all men are equally unskilled, and on nearly the same low level; in the second, great local differences arise from the fact that progress is always due to individuals; in the third and higher stage, the tendency is again in favour of equality.

On the subject of trade, Garve expresses the opinion that a completely developed and firmly established trade tends to foster superior morality, because it leaves less room for suspicion and over-reaching, as all goods are then exchanged in large quantities and by men thoroughly acquainted with each other's business.

Many of Garve's views are to be found in the introductions which he wrote for his translations; his original compositions supply useful historical information on the state of Germany towards the close of the last century.

[Roscher, *Geschichte der Nat. Oekonomik in Deutschland*, pp. 603-608.] E. ca.

GASKELL, P. (19th century), author of

Artisans and Machinery, London, 8vo, 1836, 2 reprint with some additions of *The Manufacturing Population of England*, London, 8vo, 1833, by the same author. It contains an interesting and apparently trustworthy account of the physical and social condition of the cotton operatives. The writer, as a medical man, speaks with some authority, but is hardly to be followed in his indignation at the regulation of child labour by the FACTORY ACT 1833, or in his prophecy that the time was rapidly approaching when the labour of men would be almost entirely superseded by machinery.

[*The Manufacturing Population of England* is referred to in Pleuer's *English Factory Legislation*, Eng. trans. London, 1873, 8vo, p. 12 note.]

H. E. E.

GASPARIN, ADRIEN ÉTIENNE PIERRE, Count of (1783-1862), began life as a soldier, but abandoned the military service in consequence of a wound he received in 1806, and devoted himself to the cultivation of his extensive landed property in the neighbourhood of Avignon. Under Louis Philippe he was successively made a prefect, minister of the interior, and minister of agriculture; in 1850 he organised, as director, the *Institut Agronomique* of Versailles which was suppressed by the second empire. His principal works are—*Des petites Propriétés considérées dans leurs rapports avec l'Agriculture et le sort des ouvriers* (Paris, 1821); *Recueil de Mémoires d'Agriculture et d'Economie Rurale*, Paris, 1829-41, 3 vols., the first volume being a handbook for the owners of property farmed at a rent, the second on *Métayage*, and the third on the introduction of silkworms into Europe,—the *Coup d'œil sur l'Agriculture en Sicile* (1832), and his *Cours d'Agriculture* (5 vols. 1843-49). The last volume of his *Cours d'Agriculture* gives the substance of his views, opinions, and experiences, embracing both theoretical questions, such as the theory of rent of Ricardo, which he attempts to complete, and purely practical questions, such as the calculation of the cost of production in agriculture, the yield of manures, methods of agricultural book-keeping, etc.

M. de Gasparin is one of the most distinguished modern French agriculturists; his opinions are those of a practical man, looking carefully and objectively at every aspect of a question. Thus, on small and large properties, he writes: "If we have to pronounce on the advisability of large or small properties in a country, let us first remember that, like all other industries, agriculture wants capital, and that the size of an estate must everywhere be proportionate to the average available capital of the tenants (*Cours d'Agriculture*, v. p. 253)." He considers FARMING as superior to MÉTAYAGE, because "the exact and complete distinction between the interests of the landowner and of the farmer affords the powerful stimulus which

has brought cultivation to its degree of perfection. The proprietor is obliged steadily to ameliorate the value of his estate in order to maintain or raise his rent at the expiration of the lease, and the farmer, impelled by competition to pay the highest possible rent, . . . makes use of the largest possible circulating capital and the more advanced methods to secure a profit in his undertaking (*Cours d'Agriculture*, v. p. 302)." Still Gasparin had stated in his *Recueil de Mémoires* (ii. p. 105) that "métayage is not an arbitrary arrangement independent of social conditions, but a necessary contract, wherever the rural population is not in possession of capital," and in his *Cours d'Agriculture*, (v. p. 324) he points out that under this system "both the owner and the tenant have an inheritance to transmit to their family, the former his land, the second his tenure. . . . Inferior to farming as a system of cultivation, métayage is superior in many other respects."

Strongly impressed with the importance of the cultivator being sufficiently paid, M. de Gasparin insisted, in his first publication (*Des petites Propriétés*), on the advantage of high agricultural wages: "In countries where the peasant is well fed, high wages are only high in appearance; their high rate is compensated by the strength and energy of the worker" (p. 9). E. ca.

GASPARINO, BARTOLOMEO (17th century), a Bolognese theologian.

Gasparino wrote on the measures by which the government in the pontifical states sought to regulate the corn trade. He devoted the first part of his work to the theory of price, and collected the doctrines of the canonists on the *Iustum Pretium*. The altered circumstances of the times induced him to adopt different principles. According to him, price is founded on utility, as well as on supply; therefore he declares the *legitimate price* to be an untrue price when established without considering such circumstances, and when it is not regulated in such a manner as to bring prosperity both to buyer and seller, replacing to the latter the cost of production.

De legitimo et naturali rerum venalium pretio præsertim circa frumenta, Forolivii, 1634.

A. B.

GASSER, SIMON PETER (1676-1745). After having studied at Leipsic and Halle, he lectured on law at Halle, and was called by King Frederick William I. of Prussia to the first chair of economy founded in the Prussian dominions, at the university of Halle, in 1727. It is known how intensely the king was devoted to the economic development of his states, according to the methods of the mercantilists. Gasser's purely practical tendencies, and his disinclination to theory, were in strict concordance with the king's personal aims. His writings on law are all in Latin, but he published in German his introduction to the

economic, political, and cameralistic sciences (*Einleitung zu den oekonomischen, politischen, und Kameralwissenschaften*, 1729), although he never went beyond the first part, in which he successively deals with state domains, royal dues, taxes, cattle-breeding and rights of pasture, minor agriculture, peasant services and dues, forestry, etc. The book is dedicated to king Frederick William I., "the great *Economus*, and still greater soldier."

Gasser is at heart a matter-of-fact man of his time, with no anticipation of a still remote future. The revenue derived from the state domains and royal dues was to cover the civil expenditure; taxation proper, the military expenses. He deems the voting of taxes by assemblies quite useless, as the existing services are well acquainted with what the land can bear, and are better able to remonstrate in case of need. Still he is no blind admirer of the king's favourite *Plus* (bonus) policy, as he knows "things which cannot be estimated in money."

He observes of theoretical rules, that in their application a great deal always depends on personal skill and ability, and judiciously lays stress on the fact that the various parts of the kingdom being very unequally developed, each must be dealt with according to the level it has reached. His clear practical insight also leads him to take a discriminating view of the relative merits and demerits of extensive and intensive agriculture: tillage with oxen is cheapest and safest in some places and with horses in others. He has a strong bias in favour of large family estates and trusts (*fideicommissa*) (see *FIDEICOMMISSUM*), and although he confesses that the peasantry were heavily burdened, he objects to a policy of alleviation of their burdens, and prefers to leave things as they were.

[Roscher, *Gesch. der Nat. Oek. in Deutschland*, pp. 371-376.] E. ca.

GAUDIN, MARTIN MICHEL CHARLES. See GAËTA, DUKE OF.

GAUGER, the name by which the exciseman was some years ago not unfrequently known, is a term of considerable antiquity. It occurs in 5 & 6 Edw. VI. ch. 16, and again in 12 Car. II. c. 23; so that it was legally recognised as an official title: it was used as such in the old form of commission to officers of excise. It is obviously derived from the duty of gauging or measuring casks of wine or spirits which was first established by 27 Edw. III. (1352). It is found in Scott *passim*, and was used by Burns, but it appears to have fallen into disuse since the passing of the Act 12 Vict. c. 1.

C. A. H.

GAUTIER, JULES (1781-1858), was born at Bordeaux and died at Paris. He began life in trade, and became a deputy for the Gironde in 1823. He was one of those who signed the "address of the 221" at the breaking out of the revolution of 1830. He became a peer of France in 1832, and sub-governor of the Bank of France in 1833. He was minister of finance for some months (from the 31st March to the 11th May

1839), and finally became a senator in 1852. He was the author of a considerable number of official reports, but the work which won him his greatest reputation as a liberal economic thinker—liberal, considering the period when he lived—is his book *Des banques et des institutions de crédit en Amérique et en Europe*, 1839, 1 vol. large 8vo. "A system of free competition is no doubt more favourable than any other to the progress of trade. The absence of every fetter and restraint, absolute liberty in fact, marks the soil in which commerce grows the quickest and flourishes the best. It is especially to prudent self-interest that recourse must be had to avoid the dangers with which the course of credit is beset." It was a deputy-governor of the Bank of France who wrote these sentences, and during the time when he held that office.

A. C. F.

GAVELKIND. Before the Norman Conquest this term was applied to lands which paid *GAFOL* or rent, either in money or in kind. The Norman Conquest generally introduced feudal tenures into England. But in some parts of the country land is still held by the customs of gavelkind. In the county of Kent this survival of old customs is the rule, and land is held to be gavel-kind unless it can be proved either that it was never subject to this tenure, or that it has been disgavelled by custom or otherwise. Outside Kent this tenure is a rare exception. The chief peculiarities of gavelkind are as follows:—(1) if the holder died intestate his lands passed to all his sons as co-heirs, without any preference for the eldest; (2) the tenant can alienate at the age of fifteen; (3) estates were deviseable by will at a date when other lands are not subject to testamentary disposition; (4) lands never escheated on conviction of felony.

[Elton, *Tenures of Kent*.—Digby, *History of the Law of Real Property*.]

R. L.

GAZETTE. Announcements of an official nature are, in England, made in the *London Gazette*; in Scotland, in the *Edinburgh Gazette*; in Ireland, in the *Dublin Gazette*. Such announcements are evidence as to any matters in which the crown or the government is concerned (see *King v. Holt*, 5 Term Reports, 436), but in the absence of express statutory provisions, they are not in themselves evidence of matters concerning private interests only. As to the dissolution of partnerships, etc., the Partnership Act, 1890, provides (§ 36) that "an advertisement in the *London Gazette* as to a firm whose principal place of business is in England or Wales, in the *Edinburgh Gazette* as to a firm whose principal place of business is in Scotland, and in the *Dublin Gazette* as to a firm whose principal place of business is in Ireland, shall be notice as to persons who had not dealings with the firm before the date of the dissolution or change so advertised."

As to the bankruptcy proceedings in England, it is enacted by the Bankruptcy Act 1883, § 132, that "the production of a copy of the *London Gazette* containing any notice of a receiving order, or of an order adjudging a debtor bankrupt, shall be conclusive evidence in all legal proceedings of the order having been duly made, and of its date." E. S.

GEBUR (modern *boor*), an Anglo-Saxon term for a villein. The *Rectitudines Singularum Personarum*, of the 10th century, describes him as doing service, week-work, and paying rent (*gafol* or *gablum*). Vinogradoff thinks that in Norman times the word was inexactly used and becoming obsolete (see *GABLATORES*).

[Seeböhm, *English Village Community*.—Kemble, *Saxons in England*, vol. i.—Vinogradoff, *Villainage in England*.] E. G. P.

GEE, **JOSHUA**, a merchant, known only by his writings on commerce and manufactures, published 1725-50. In these he expressed a keen anxiety to see the government of Great Britain, in the face of decaying agriculture, declining woollen industry, and Gallicised tastes, intervene more actively to foster and regulate trade and manufacture; that this kingdom is capable of raising within itself, and its colonies, materials for employing all our poor in those manufactures, which we now import from such of our neighbours who refuse the admission of ours. Influenced by Petty, he gave a descriptive analysis of England's foreign trade and also an historical sketch of legislation affecting wool. He proposed that the export of wool be absolutely prohibited, but in a second pamphlet expressed a preference, in order to prevent over-production and increase of smuggling, for a limited export regulated by a system of local registration. A reply, in general terms, may be read in Defoe's *A Plan of the English Commerce*, pt. ii., with some account of the commodities each country we trade with take from us, and what we take from them, with observations on the balance.

Gee was no mercantilist of the somewhat mythical sort who were supposed to care only for the retention and increase of bullion as such. His great solicitude was to see agriculture and manufactures occupying with profit all the available manual stock in England, a considerable part of which in his day was infesting town and country as beggars and vagabonds. He held this could be at least more promptly and efficiently brought about by protective legislation. The specific motive for immediate legislation lay he thought in the fact of Louis XIV. having compelled "The wearing of French manufactures" in France, "which before used to be supplied from England, and turned the trade so much against us"; also in the effect produced by the peace between England and France early in the 18th century, namely, a great influx of English into France, and a consequent diffusion of taste for French fashions and French goods in England.

Gee was a contributor to the *British Merchant*, and is the author of the following:—

The Trade and Navigation of Great Britain considered; showing that the surest way for a nation to increase in riches is to prevent the importation of such foreign commodities as may be raised at home, London, 1729, 8vo.—*An Impartial Enquiry into the Importance and Present State of the Woollen Manufactures of Great Britain, as likewise the Improvements they are capable of receiving*, Lincoln and London, 1742, 8vo.—*The Grazier's Advocate, or Free Thoughts of Wool and the Woollen Trade*, London, 1742, 8vo.

C. A. F.

GEIJER, ERIC GUSTAV (1783-1847), an eminent Swedish historian and poet; appointed professor of history at the university of Upsala in 1817. His principal writings are *Annals of the Kingdom of Sweden (Svea Rikes Håfder)*, Upsala, 1825), and *History of the Swedish People (Svenska Folkets Historia)*, Örebro, 1832); neither of them brought down to his own time. The latter has been translated into English by J. H. Turner (London, 1845). Geijer wrote besides many political and philosophical essays, especially in the *Litteratur-bladet*, a monthly journal edited by himself (1838-39). A series of articles in this journal, on *The Poor-laws and their Bearing on Society*, have been reprinted in English, and published separately (Stockholm, 1840). The "chief purport" of the treatise "is to vindicate the freedom of labour." Geijer traces the causes of the growth of poverty from ancient times, and deals especially with the poor laws of Sweden, but poverty in England is also discussed, and the Poor Law of 1834 is favourably criticised.

[Turner, Introduction to *History of the Swedes*, translated by J. H. Turner, London, 1845; Geijer, *Minnen*, Upsala, 1834.]

R. H. H.

GEMELLI, FRANCESCO (1700), a Piedmontese eclectic writer.

He considered agriculture the most important industry in every country. He agreed with FILANGIERI in theory; he did not go far enough to follow him in complete free trade, though he was willing to admit free trade in corn at home, and to allow a perfect free trade in corn to avoid famine in Europe; but, since an agreement on this point is not probable, he thinks that every sovereign should study the peculiar conditions of his own state. Hence he praises the reforms in Tuscany since it has access to the open sea; he praises the policy followed in England, because the price of corn there is regularly higher than elsewhere.

Riformimento della Sardegna, proposto nel miglioramento di sua agricoltura, Turin, 1776.

A. B.

GENÉRALITÉ. In 1551 the French king, Henri II., appointed sixteen *trésoriers généraux* to supervise the collection of taxes throughout the kingdom. The district assigned to each of these officials was called a *généralité*. When Richelieu set himself in the 17th century to

break down the traditional independence of the provinces, he made use of the *généralités* as the administrative districts of his intendants. Henceforward, until the creation of departments in 1790, the district thus designated was the chief unit of local administration, and when the states-general were summoned for the last time in 1788, the deputies were elected from each *généralité*, instead of from the *bailliage* or *sénéchaussée*. In the 18th century France contained twenty-six *généralités*, and there were also seven intendants in provinces which had been added to France since the time of Richelieu.

[Gasquet, *Précis des institutions politiques et sociales de l'ancienne France*.] R. L.

GENOA, BANK OF. See BANKS.

GENOVESI, ANTONIO (1712-1769), born near Salerno and died at Naples, took holy orders in 1736. In 1741 he taught metaphysics at the university of Naples. He was intimately acquainted with Bartolomeo Intieri, who induced him to follow BROGGIA and GALIANI in the study of economics; and when, in 1754, by the advice of Intieri and with funds liberally supplied by him, the teaching of economics, then termed mechanics and commerce, was established at Naples, Genovesi was called to the chair. He was "the most distinguished and the most moderate of all Italian mercantilists. . . Commerce was for him not an end only, but also a means by which the products of industry at large were brought to the right market. He, moreover, distinguished between useful commerce which exported manufactured goods and brought back in return raw material, and harmful commerce which exported raw material and imported foreign goods; he also insisted that useful commerce calls rather for liberty than for protection, while upon harmful commerce the strictest embargo should be laid, or at least it should as far as possible be bound hand and foot" (Cossa, *Introduction to Pol. Ec.*, translation, p. 235).

These ideas, neither new nor original even in his time, were maintained by Genovesi in many of his works, and brought together, but without any systematic order, in his *Lezioni di Commercio ossia di Economia Civile* (Napoli, 1765, e. ii. ediz. 1768-70, 2 vols.). Though the *Lezioni* do not form a regular treatise, they contain the author's opinions on the mercantilist system and the most important principles of economics, which he terms *Civile* "la scienza che abbraccia le regole per rendere la sottoposta nazione popolata, potente, saggia, polita" (the science which embraces the laws which make a nation populous, powerful, wise, and cultured), limiting thus the science to the increase of population and the production of wealth.

As to population, Genovesi follows the mistaken principle of his times, exaggerating the advantage of a large population, proposing that government should encourage marriages by granting privileges and honours. He says that the population ought not only to be numerous but supplied with comforts, and he sees the relation between population and means of subsistence or production of wealth.

As a writer he is a mercantilist, though he does not regard money as the only form of riches; he says that the wealth of a nation is quite apart from the quantity of money treasured up.

He derives the idea of value from demand, distinguishing different degrees of demand according to their abstract importance in several categories, maintaining that a thing which satisfies a want repeatedly has a higher value than what satisfies only a few wants or the same only sometimes (*può soddisfare ad un bisogno più volte, ha maggior prezzo che non quella, la quale o non può soddisfare che pochi bisogni o al medesimo qualche volta*). What is able to satisfy a great want is of more value than what satisfies a small want (*una cosa fatta a soddisfare il maggior bisogno si apprezza più che quella la quale non è fatta che a soddisfare ad un minore*); and further he asserts that the quality of things influences the value. Graziani (*Storia della teoria del valore in Italia*, Milano, 1889, p. 108) justly remarks that in this Genovesi approaches the important question which GALIANT answered: namely, why do luxuries generally cost more than necessities? In this he is obliged to have recourse to the element of scarcity, a line of argument which he does not know how to reconcile with those previously mentioned. Genovesi's want of originality is obvious, as F. Ferrara has shown (*Bibl. dell' Econ.*, 1^a S. vol. iii. Introduz.) in contradistinction to the exaggerated opinion which Bianchini held respecting him (*La scienza del ben vivere sociale*), since the SOCIALISTS OF THE CHAIR persist, erroneously, in considering him as a precursor of their opinions. This tendency is also attributed to Genovesi, as well as to BECCARIA, VERRI, and ROMAGNOSI by the French socialist B. MALON; which is a further example of the errors of the socialists in their historical criticism of political economy.

"According to Gobbi the Neapolitans FORTUNATO (1760), Strongoli (1788), and VENTURI (1798), belonged to Genovesi's school, and then there was also ZANON of Udine (*Lettere*, 1756-67), Todeschi di Ferrara (*Opere*, 1784) and Marcello Marchesini of Istria (*Saggio d'Econ. Pol.*, Napoli, 1793).—Cossa, *Introduction to Pol. Ec.*, translation, p. 236.

Besides his philosophical works, Genovesi wrote: *Ragionamento intorno all' agricoltura, con applicazione al Regno di Napoli* 1769 (Scrittori classici italiani di Ec. Pol. Custodi, p. ii. vol. ix.).—*Altro Ragionamento*, ed. (ibid.).—*Ragionamento sul commercio in generale* 1750 (id. vol. x.).—*Ragionamento sulle manifatture* (ibid.).—*Ragionamento sullo spirito della Pubblica Economia* (ibid.).—*Digressioni Economiche* (ibid.).

[For the works of Ferrara, see A. Bertolini, *La Vita e il Pensiero di Francesco Ferrara*, 1895.] A. B.

GENTLEMAN, TOBIAS (fl. 1614), was "born a fisherman's son by the sea-side and spent his youthful time at sea about fisher affairs." He published *England's Way to win Wealth, and to employ Ships and Marriners*, etc. London, 1614, 8vo, Reprinted in the *Harleian Miscellany* (1809), vol. viii. This pamphlet was the result of a conference between the author and John Keymor, whose *Observation made upon the Dutch Fishing about the year 1601*, was printed from the original manuscript, for Sir Edward Ford, in 1664. *England's Way*, etc. evidently owes much to Keymor's investigations. It contains a good description of Dutch

fishing in English waters and of the ports on the east coast. The author urges the importance of developing the herring fishery, and attributes the prosperity of the Dutch to their activity in this respect. His tract is frequently quoted with approval by 17th century writers, e.g. MALYNES, who gives an abridgment of it (*Lex Mercatoria*, c. xlvii.). W. A. S. H.

GENTZ, FRIEDRICH VON (1764-1832), an eminent German publicist, was born at Breslau. His father was an official of the mint there; through his mother he was connected with the family of the minister Ancillon. He studied at the Joachimsthal Gymnasium at Berlin, to which city his father had been transferred, and afterwards at Königsberg, where he came under the influence of KANT. In 1786 he was appointed secretary of the general directory, and afterwards became Kriegs-rath. His life at Berlin seems to have been for some time a dissipated and aimless one; an illness led him to change his course and follow more serious pursuits; and the outbreak of the French Revolution still further awakened his intellectual activity. He was an ardent admirer and well-wisher of the Revolution till repelled by its excesses, when he became its determined opponent, and a warm advocate of the English constitutional system. This change in his opinions is indicated by his translation—a masterpiece in its kind—of Burke's *Reflections* and of the anti-revolutionary writings of MALLET DU PAN and Mounier. He discussed political events and handled financial questions with great ability in several journals—amongst others in the *Neue Deutsche Monatschrift*, a periodical which he founded, and for some years conducted. He also published in 1797 a German version of D'IVERNOIS' work on French financial administration, and in 1801 (in French) an *Essai sur l'état actuel de l'administration des finances et de la richesse nationale de la Grande Bretagne*. The economic views in favour of free industry, which he had learned from Adam Smith, are exhibited in his letter (1797) on the accession of Frederick William III., which is said to have offended the king and hindered Gentz's promotion. He was believed to be in the pay of the British Government, as he warmly applauded their policy; but there can be no doubt that the writings by which he earned their gifts expressed his genuine convictions. What made such pecuniary aid almost necessary to him was the extremely expensive and wasteful management of his private affairs, which kept him in difficulties all his life. He had domestic troubles, due, it is said, chiefly to his own conduct; and, such advancement as was suitable to his powers being no longer open to him in Prussia, he left that country in 1802, and, after residing some months in Dresden, where he entered into relations with Metternich, went in the same year to Vienna, where he

became a member of the imperial council. Before settling finally in Austria he paid a visit to England, made the personal acquaintance of Pitt and other leading politicians there, and obtained a regular pension from the British government. We cannot here follow in detail the course of his general political action, which is indissolubly connected with the history of Germany. Up to 1812 he fought, as a literary volunteer, side by side with STEIN as a relentless enemy of Napoleon and his system, and an earnest and uncompromising advocate of German independence. He drew up a number of vigorous and telling memoirs directed against the oppressive policy of France, which, however, for a long time failed to rouse the energies of the Austrian court or to impress upon it the necessity of joint action with Prussia. All through the course of the wars with Napoleon, and in the negotiations which followed them, his ready and powerful pen was in frequent requisition, and all the most important state-papers of the allies were his work. After the peace he exercised much influence on the internal politics of Austria; his tendencies then became retrograde, and he contradicted the principles of his earlier years. He seems to have been affrighted by the growth of revolutionary ideas, and especially by the excesses of democratic journalism; and devoted himself to the support of existing governments, and the maintenance of the restored states-system of Europe. He was employed to draw up the protocols at many congresses of princes and ministers, and became the favoured and richly-rewarded champion of reigning powers, and a resolute antagonist of the spirit of the age. But he felt that this spirit would be too strong for all opposing forces, and towards the end of his career endeavoured to reconcile the principles of legitimacy with the dogma of the sovereignty of the people. To the end he remained true to the liberal economic doctrines he had imbibed from the *Wealth of Nations*.

[Editions of selected writings of Gentz have been published by W. Weich, 5 vols. 1836-38, and by G. Schlesier, 5 vols. 1838-40. His Correspondence with Johannes v. Müller and others has been edited by Prokesch-Osten, Schlesier, and Mendelssohn-Bartholdy. The last-named has also published a biography of Gentz, 1867. In addition to such of his writings as have been already named may be mentioned his *Politische Parodien*, 1799; *Ueber den Ursprung und Charakter des Kriegs gegen die französische Rev.*, 1801; and *Fragmente aus der Geschichte des politischen Gleichgewichts in Europa*, 1804; which last, for the glowing patriotism which it breathes, has been compared to Fichte's *Reden an die deutsche Nation*.]

J. K. I.

GEOGRAPHY, COMMERCIAL (CONNECTED WITH GREAT BRITAIN). During the 19th century the world has been passing through an economic revolution utterly without pre-

cedent. In spite of the commercial enterprise shown by various European nations in bringing distant countries into touch with each other, up to the end of the 18th century and even during the earlier part of the 19th century each country remained for the most part self-sufficing as regards the chief necessities of existence. The wants of the great mass of slowly expanding populations were supplied through the medium of a vast number of local markets, serving as depôts for the corn and raw material for clothing produced in the surrounding districts. Agriculture and home industries of every description were carried on side by side; it was only the finer species of manufactured articles that found an outlet in foreign markets. Prices varied largely in different districts, according to the varying supplies of the local market. Proximity to a sea-coast, or navigable river, or canal, enlarged the area of supply, but, as a rule, each locality produced what it required for ordinary consumption, and the growth of population was necessarily limited by the enormous difficulty, in the existing state of communications, of drawing its food supplies from a distance. Foreign goods, such as the precious metals, tea, sugar, tobacco, spices, wine, silks, and muslins, which might bear the cost of expensive transport, formed part of the market wares of every European country which had distant commercial dealings, but such foreign products formed but a small portion of the local trade compared with the indigenous products. Even in the United Kingdom, where there were greater facilities for internal movement than in the rest of Europe, land-transport met with almost insurmountable obstacles. A broad-wheeled waggon drawn by eight horses, and attended by two men, took three weeks to carry four tons of goods between London and Edinburgh (*Wealth of Nations*, bk. i. ch. iii.), while a coach took a week or more to go the same distance. Under such conditions, prevailing even in the most progressive countries, stationariness of production and population alike remained the prevailing feature of the economic world. During the present century the ever-increasing application of steam-power to industry has tended more and more to transform the old condition of things; by facilitating the transport of the heavier agricultural products it has brought the interior of every country into touch with the coast, and therefore extended the whole range of commercial dealings. Chicago, for instance, at a distance of 4000 miles, is now much nearer to London than Edinburgh was sixty years ago, and the carriage of a quarter of wheat from Delhi to Liverpool costs now only a little more than half a sovereign. The local market for all the ordinary necessities of life has more and more become part and parcel of the world's market. The poorest British

household may now find its wants satisfied by every quarter of the globe. Its flour may have come from India, its meat from Canada or New Zealand, and the raw material of its clothes from America or Australia.

In effecting this great economic revolution Great Britain has been the chief agency. Her prolonged struggle with the naval and military forces of Europe, organised by the genius of Napoleon, left her burdened with an enormous national debt, but it left her mistress of the seas, able to appropriate the results of the commercial enterprise of Europe, and to augment it with an energy all her own. Without the risk of any European rivalry, she was allowed a free hand in consolidating her Indian Empire, developing her Canadian colony, founding new settlements in Australia and New Zealand, and paving the way for an African protectorate. During the last seventy years she has made good use of her great mineral resources—coal and iron—to establish markets in every quarter of the world. The area of the British Empire, including dependencies, colonies, and spheres of influence, is now estimated by Mr. J. Scott Keltie at about 11,391,000 square miles, more than one-fifth of the whole land area of the globe. It is three times the size of Europe, nearly three million square miles larger than the whole of the Russian empire in Europe and Asia, nearly nine times the size of the German empire at home and abroad; nine million square miles more than the whole of the French dominions, and just about as large as the whole of Africa. This immense territory is inhabited by something like 383,000,000 souls, embracing almost every type of humanity, about the same population as that of all Europe, and constituting from one-fourth to one-fifth of the population of the world. Its products are of infinite variety, and the only supplies which at present its population must draw largely from foreign countries are corn and cotton. The trade of the empire is valued at about £1,700,000,000, about one-third of the trade of all other civilised countries put together. Of this total the trade of the United Kingdom is £1,014,000,000 while £686,000,000 is to be credited to the empire beyond our shores. Of these £686,000,000, about £352,000,000 belong to the 7,000,000 odd square miles of colonies proper, with a population of nearly 14,000,000, mostly whites; and £334,000,000 to the tropical and sub-tropical possessions covering an area of only about 4,096,000 square miles, but with a population of 326,000,000, chiefly coloured. In order to protect the carriage of commodities that circulate between the most distant portions of this widely-scattered empire, Great Britain has found it necessary to hold certain points of vantage along the main sea-routes. Along the quickest route to our Indian empire are to be found the strongly-fortified stations of Gibraltar,

Malta, and Aden, the latter garrisoned by Indian troops. The magnitude of our commercial interests in this direction is proved by the fact that the transit trade of Malta amounts to nearly £50,000,000, and that, out of the total number of ships (4257) that passed through the Suez Canal in 1904, 2679 were British, the gross tonnage being respectively 18,661,092 and 12,164,591. The danger to which these interests are exposed from the hostility of Russia or the rivalry of France, has been held to justify the occupation of Cyprus and Egypt.

In India and Ceylon, British shipping has the protection of Bombay and Trincomalee, and in a lesser degree of Kurrachee, Colombo, and Calcutta; and it has been proposed to add to the number of fortified stations. Farther east, Singapore commands the entrance to the Chinese seas, while in those seas Hong-Kong forms the central stronghold of British power. If we take the alternative route to the east round Africa, a similar series of fortified stations at convenient distances from each other is to be seen,—Sierra Leone, St. Helena, Cape Town, and Mauritius. The importance of Cape Town to British commerce cannot be over-estimated. It has been calculated by Lord Brassey that £90,000,000 of commerce centres at or passes this point every year, including £20,000,000 of outward trade to Australia, £13,000,000 to the Cape itself, and portions of the Indian, Chinese, and other eastern trade. But if, as might well happen in the event of a European war, the Suez Canal were to be closed, at least £150,000,000, and possibly £200,000,000 of British trade would be forced to go round the Cape. At the converging points of the two great eastern routes we find the important Australasian stations of King George's Sound, Thursday Island, Melbourne, Sydney, and Auckland. Going westward across the Atlantic we find fortified stations in Halifax, Bermuda, St. Lucia, and Jamaica, and farther south the Falkland Islands, lying on the route round Cape Horn. In the Pacific, Esquimaux and Vancouver will conveniently form the basis of protection for the routes opened up to the east by the completion of the Canadian Pacific railway, while the Fiji Islands, supplied by nature with excellent harbours, lie across the path of ships sailing either from British Columbia or round South America to the Antipodes.

The existence of these well-selected stations on all the chief lines of communication is the greatest element of strength in the naval supremacy of Great Britain, and upon their safety in time of war would depend the preservation of British commerce. From these stations would have to be drawn those supplies of coal without which no modern fleet can keep the sea for more than a few weeks. And inasmuch as Great Britain has, in all the ports of the world directly under the control of its government,

adopted the policy of free-trade, and is favoured by no differential tariffs, even where its self-governing colonies have adopted a protective system, it may fairly claim, while guarding its own commerce, to be guarding that of the world at large.

To appreciate the absolute dependence of Great Britain on its commercial relations with the rest of the world, we have only to look at the economic features of its existence. Sixty years ago one-third of its working population consisted of agricultural labourers and one-third of artisans. Now only one-tenth are agricultural labourers, and three-fourths are artisans. As a consequence of this change, Great Britain can no longer feed itself. She has now (1906) to draw more than three-quarters of her supplies of corn and flour from abroad. The United States, Canada, India, Russia, Argentina, Australia, and New Zealand send her corn, maize, and rice. It is the same with her meat supplies. It has been calculated that the quantity of meat food at any time in the United Kingdom is only sufficient for three months. Hundreds of thousands of live cattle and many hundred thousands of tons of meat have to be imported into the country every year from across the sea, the United States, Canada, South America, Australia and New Zealand; even the home supply of eggs, butter, and cheese has to be supplemented from abroad; while the ordinary comforts of every breakfast-table—tea, coffee, cocoa, and sugar, are entirely supplied from each of the four great continents. For these articles of daily existence alone Great Britain has to pay over £190,000,000 to the rest of the world, and if she were cut off from the outside world for even a few days, every household would feel the pressure of a sudden rise in prices. But not merely does Great Britain depend for its daily food on foreign supplies; it largely depends on the same source for its daily wage. With the exception of coal and iron, the raw material of British industry comes chiefly from abroad. Wool is imported to the value of over £20,000,000 from Australia, New Zealand, Africa, South America; cotton to the value of £41,000,000 from America, India, Egypt; wood to the value of £25,000,000 from Canada, Russia, Scandinavia, United States, Honduras; flax, hemp, and jute, to the value of £10,000,000, from Russia, India, and other countries. But it is not sufficient for Great Britain to import food and the raw material of her industries; she has to have access to markets for her manufactured products. About one-half of the British exports consists of more or less manufactured fabrics. The export of cotton manufactures reaches £72,000,000, of woollen manufactures £20,000,000, and of linen and jute £8,700,000; of metals, hardware, and cutlery the exports amount to about £35,000,000, and of machinery to over £18,700,000.

The trade of the United Kingdom itself, excluding exports of foreign and colonial produce, may (1903) be divided into four great portions:—

	Imports.	Exports.
	£	£
With Europe	246,000,000	123,000,000
" United States	128,000,000	21,000,000
" British Possessions	151,000,000	127,000,000
" Other foreign countries	71,000,000	75,000,000
	596,000,000	346,000,000

Great Britain's export trade with Europe is to a very great extent made up of woollen, cotton, and linen manufactures, metals—especially iron and copper—coal, and machinery. To a lesser degree she sends leather, hardware, and chemicals. Her European imports show every possible variety. She takes corn from Russia, Germany, Austria, Turkey, France, Roumania; cattle and meat from Belgium, Holland, Denmark; butter, poultry, eggs from Belgium, Denmark, Russia, Holland, Germany, Sweden, France, Italy; cheese and milk from Switzerland, Holland, Belgium, France. From France, Germany, Italy, Spain, and Portugal she takes sugar, wine, oil, fruit; of the raw material of industry she imports flax, hemp, and wool from Belgium, Italy, Russia; timber from Norway, Sweden, Germany, Russia; lead and iron from Belgium and Spain; of manufactured fabrics she takes silk and woollen from France, Belgium, and the Netherlands.

The commerce between Great Britain and the United States is much less varied in nature than that between Great Britain and Europe. It is almost entirely the exchange of manufactured articles for food or the raw material of industry. The United States sent Great Britain, in 1902, corn and cotton to the value respectively of about £21,700,000 and £29,000,000, and meat (dead and alive) to the value of about £26,000,000. She took in exchange iron, cotton, linen, woollen, flax, hemp, and jute manufactures. The only articles of food she takes from Great Britain are delicacies such as biscuits, pickles, sauces, and marmalade, though she imports sugar and tea from British possessions. The total export and import trade of the United States now amounts to about £542,000,000 sterling, of which about £168,000,000 is with the United Kingdom.

But the trade between the United Kingdom and the United States, though far exceeding the proportions of that between the United Kingdom and any one foreign country, is itself largely surpassed by that between Great Britain and the British empire, amounting to over £276,000,000. At the head of the list stands British India. Great Britain finds there her largest market for cotton goods and yarn, of which the average import amounts to over £18,000,000.

Iron, copper, and machinery make up another £7,000,000, out of the total value of British imports of about £41,000,000. From India Great Britain takes in exchange cotton, jute, seeds, tea, coffee, rice, and indigo. In 1902 one-twelfth of the foreign wheat came from India, and of the tea, which used to come almost entirely from China, more than seven-eighths came in 1902 from India and Ceylon. Of the total trade of India nearly half is with the United Kingdom. The total trade of Ceylon is £15,897,000, and the British share is about £5,793,000. The chief exports, besides tea, are coffee, cinchona, plumbago, and cocoa-nut products.

The trade of Straits Settlements—consisting of Singapore, Penang, and Malacca—is largely a transit trade, but there is also a considerable local trade in the exchange of tin, spices, cutch, gambier, gutta-percha, with the cotton and iron goods of the United Kingdom. The total trade amounts to about £143,000,000 sterling annually, but of this England's share is only between £21,000,000, and £22,000,000. The total number of vessels that cleared at the ports during 1903, exclusive of native craft, was 9519, with a tonnage of 9,213,846 tons. Hong-Kong is the farthest point east in the British Empire, and is the great centre of British commerce with China and Japan. Its trade amounts to about £11,000,000, and of that about £5,600,000 is with Great Britain. The trade of Hong-Kong, like that of Singapore, is chiefly a transit trade carried on by over 23,000 vessels and nearly 16,000 junks.

The commercial intercourse of China is largely with the United Kingdom and the British colonies, and is carried on through the thirty-nine trading ports of the Empire. The exports to and imports from Great Britain amounted in 1903 to over £12,000,000, the former being chiefly of tea and silk, and the latter of cotton, iron, and woollen goods. The import of cotton goods from Bombay is rapidly growing, while that of Indian opium is falling off, though it still remains, next to cotton, the chief import, valued at about £6,000,000. The trade of Japan is of a somewhat similar character to that of China, but its exports are rather more varied. It takes £4,592,000, chiefly cotton and woollen fabrics, iron, and machinery, from Great Britain, but it only exports to it about £2,300,000. Its chief export trade is with the United States and with China.

Turning south, we come to the tropical British dependency of North Borneo, administered by a chartered company, chiefly producing sago, rice, gums, coffee, timber, spices, gambier, gutta-percha, tapioca, and tobacco. Adjacent to it on the north-west are the sultanate of Brunei and the district of Sarawak, which, in addition to their specially tropical products, are said to be rich in minerals, especially coal. Off the coast of Borneo

lies the little island of Labuan, which seems likely to become an important naval station in the East Indian Archipelago. Last among our purely tropical settlements in the eastern seas must be mentioned New Guinea, with its still undeveloped resources, waiting the help of coloured labour.

Passing across the Pacific we find many islands belonging to the British empire. There is an export trade with these in copra, guano, sugar, and fruit, and an import trade in hardware, machinery, drapery, bread-stuffs, and timber, principally with Great Britain and her colonies, which has been encouraged by the new sea-route between Vancouver and Australia and New Zealand. In view of the piercing of Central America by a canal, our West India possessions are admirably placed for sharing in the transit trade that would spring up. The competition of the beet-sugar of Europe rendered these islands less valuable than they were, but the removal of the sugar bounties has given them more hope. Besides sugar they export cocoa, cinchona, tea, coffee, and fibres, while their trade in fruit is rapidly developing. The total trade of British West India amounts to about £12,000,000, one-third being with Great Britain. On the South American continent there is only one piece of country under the British flag—British Guiana, and it is the only part of South America secure against disorder. Its trade, similar to that of the West Indies, amounts to about three and a half millions sterling—£1,500,000 with the mother country. With the whole of South America the trade of Great Britain was in 1903 about £55,000,000, having increased considerably during the last decade. The chief exports are animal products and wheat, in exchange for cottons, woollens, iron, and machinery.

We come last to the three great colonial settlements of the British empire in the proper sense of the term—Canada, Australasia, and South Africa. Canada covers an area of 3,745,000 square miles, but the northern portions of it can hardly be regarded as habitable by people of European extraction. Its population is about 5,370,000, and since the opening up of the western portions it has been rapidly growing, swollen as it is by an annual addition of about 80,000 to 100,000 emigrants. Its total trade has now reached the amount of £94,000,000, Great Britain and the United States both sharing in it largely. Its chief exports are timber, cattle, agricultural produce, fish, and minerals, including gold. Its imports are largely manufactured articles, of which it took in 1903 from Great Britain about £12,000,000. Off the coast of Canada is the oldest British colony, Newfoundland. It has only one industry of any commercial value, and that is fishing. Its exports are almost entirely marine produce, amounting to over £1,800,000

sterling. Compared with Canada, the commercial development of Australasia has been remarkably rapid. With a population of only 4,549,000 it has a trade of £174,000,000, of which about £62,000,000 is with the United Kingdom. The British imports into Australasia embrace nearly every article of home manufacture, iron (wrought and unwrought), cutlery, woollen goods, apparel, haberdashery, cotton and linen goods, machinery, paper, books, chemicals, and spirits. In exchange Australasia exports gold, copper, lead, wool, meat, wheat, hides, sugar, butter, and wine. Australasia is the great supplier of wool for the textile industries of Great Britain. Of the total imports of wool into the United Kingdom in 1903 amounting to 604,961,364 lbs., 378,510,995 lbs. came from Australasia.

Africa, though on its northern shores for centuries past taking an important share in the trade of the Mediterranean, has only begun to develop commercially of recent years. Settlements have been made by various European nations along its western and eastern coasts, and in all that portion of the interior which is suited for European colonisation. Great Britain has now, since the war of 1899-1902, the greater part of the continent south of lat. 10°, including Cape Colony, Natal, the Orange River Colony, the Transvaal, and an extensive territory north and west of these. The external commerce of Cape Colony amounted in 1903 to £60,400,000, of which £43,200,000 was with the United Kingdom; while that of Natal, the Orange River Colony, and the Transvaal together was over £57,000,000, more than £34,000,000 being with the mother country. The principal exports of this region are gold, diamonds, wool, hair, hides, ostrich feathers, and sugar. We also hold Nigeria, the Gold Coast, Lagos, Gambia, and Sierra Leone in the north-west, with a trade amounting to about £10,000,000; while our large settlement in the east, including the protectorate of Uganda, Somaliland, and Zanzibar, provides, with Walfisch Bay in the south-west, the remainder of the total export and import trade of British Africa, excluding Egypt, roughly estimated at over £130,000,000, of which more than two-thirds is with the United Kingdom, and a large part with other British possessions. The trade of the territories along the Mediterranean shore is also important. The exports and imports of Egypt amount to about £42,000,000: the export of cotton and cotton seed being about £19,000,000; cereals, beans, and sugar making up the other chief commodities. The trade of Tunis, Algeria, and Morocco makes up another £38,000,000; cereals, wine, sheep, and cattle being the chief exports. The rest of the trade on the east and west coasts may be roughly estimated at £21,000,000.

Of all this vast commerce circulating in the world, England is the centre. Not merely

does she pass through her ports a larger proportion of that commerce than any other country, but her ships carry more commerce than those of all the other countries of the world put together. She has also supplied most of the capital for developing railway communications in India, Canada, South Africa, and Australasia, and thereby brought vast territories into touch with commercial enterprise. England has no doubt had great natural advantages. Her climate has facilitated continuous work, her soil supplied her mineral wealth, her insular position safeguarded her; but it is the intelligence, energy, and courage of her people that have won for her in the past a commercial supremacy unique in the world's history (see COMMERCE, BRITISH; COMMERCE). This supremacy is now, however, threatened, and attention is being earnestly directed towards maintaining it, better commercial education and tariff reform being discussed with that object.

[Brassey's *Naval Annual*.—Cotton and Payne, *Colonies and Dependencies*.—Dilke, *Problems of Greater Britain*.—Keltie, J. S., *Applied Geography*.—Mahan, Capt. A. T., *The Influence of Sea Power upon History and The Influence of Sea Power upon French Revolution and Empire*.—Parkin, G. R., *Imperial Federation*.—Payne, E. J., *History of European Colonies*.—Lucas, *Hist. Geography of the British Colonies*.—Gosner, *Commercial Geography*.—Reclus, E., *Geographie Universelle*.—Seeley, J., *Expansion of England*.—*Statesman's Year Book*.—Strachey, Sir J., *India*.—G. G. Chisholm, *Commercial Geography*.—Zehden, *Commercial Geography*, tr. F. Muirhead.] A. K. C.

GEOMETRICAL RATIO OR PROGRESSION. Three or more quantities are in geometrical progression when, as in cases of sums of money at compound interest, each after the first is equal to the preceding one multiplied by some constant factor. For example, 1, 3, 9, 27, when the constant factor or "common ratio," as it is called, is 3, and 100, 101, $102\frac{1}{10}$, $103\frac{2}{10}$, when the common ratio is $1\frac{1}{10}$, are in geometrical progression. Malthus, who maintained that food could only be increased in an ARITHMETICAL RATIO (*q. v.*), observed that since any number of pairs of human beings can each have as many children as one pair, the population of a country, if it were regulated by procreative power alone, would be multiplied in each successive equal interval of time by a constant factor, or, to put it more shortly, would "increase in a geometrical ratio." The point of Malthus's comparison of the two ratios lies in the fact that if food could only be increased in an arithmetical progression, the addition which could be made to its production in a given period would never grow, while if population increased in a geometrical progression, the addition which would be made to the number of mouths in the same period would constantly be growing. For eighty years after Malthus first wrote, the population of Great

Britain continued to grow in a geometrical progression, the censuses showing that, roughly speaking, it multiplied itself by $1\frac{1}{10}$ every ten years.

[Todhunter's *Algebra*.—Malthus, *Essay on the Principle of Population*, bk. i. ch. i. and elsewhere throughout. Though Malthus was doubtless the first to apply the phrase "arithmetical progression" to the increase of food, he was not, of course, the first to apply the phrase "geometrical progression" to the growth of population. It is e.g. suggested by the opening of the article on population in the *Encyclopédie*, and is actually used by Voltaire (*Dictionnaire philosophique* in *Œuvres complètes*, vol. xx., p. 253).] E. C.

GÉRANDO, JOSEPH MARIA, Baron de (1772-1842), was born at Lyons and died at Paris. His life, especially in his youth, was full of dramatic incidents. He was on the eve of taking orders when the massacres of September 1792 deterred him from this step. He retired to Lyons and sided against the Convention when that city was besieged in 1793. Wounded, imprisoned, and condemned to death, he still contrived to escape and to find a refuge in Savoy. He returned to France after the amnesty, and joined the army as a private (*chasseur à cheval*). While he was in garrison at Colmar he competed (in 1799) for a prize offered by the Institute. He gained the prize; and the jury, astonished that a common soldier should have won such a distinction, begged, with success, that he might be transferred to Paris. He rapidly rose to high position; he became secretary-general in the office of the ministry of the interior. In this post he remained eight years; he then became a counsellor of state—a dignity of which the Restoration did not deprive him—and in 1830 a peer of France. In 1819 and 1820 he had given a course of lectures on administrative law. Moral science was the study which he preferred. In 1806 he had been elected to the Academy of moral and political science; and when, in 1832, this section of the Institute, which had been suppressed in 1816, was reconstituted, he was restored to the position in it he had formerly held. We shall pass by his philosophical works, and even those connected with the moral sciences, and shall refer only to the one of them which deals with political economy, that entitled *De la bienfaisance publique*, 4 vols. 8vo, 1839, a powerful book, dealing with a wide range of subjects but somewhat diffuse, the writer having covered too much ground in his work. There was no question that he was competent to deal with these subjects, having administered the Blind Asylum for thirty-five years. He had also taken part in many charitable associations, for savings, mutual help, etc., in which his assistance had been very valuable.

His other works of the same class were: *Tableau*

des sociétés et des institutions religieuses, charitables et de bien public de Londres, 1 vol. 12mo, 1824.—*Le visiteur des pauvres*, 1820-1837. Of this there have been several editions, and the work received the *prix Montyon* from the French Academy.—*De l'éducation des sourds-muets de naissance*, 2 vols. 8vo, 1827, and finally *Des progrès de l'industrie dans leur rapport avec le bien-être, physique et moral, de la classe ouvrière*, which received a prize from the *Société industrielle* of Mulhouse, 1841-45, and has gone through several editions.

A. C. F.
GERMAN SCHOOL OF POLITICAL ECONOMY. "Political economy in Germany up to the present time has been a foreign science. . . . It was imported from England and France as a ready-made commodity, and the German professors and those who taught it remained no more than scholars." This oft-quoted expression from KARL MARX'S *Das Kapital* (vol. i. appendix) is on the whole justified, if applied to the period since ADAM SMITH, but does not correctly apply to pre-Smithian times, when the economic precepts termed collectively "the cameral sciences" (see CAMERALISTIC SCIENCE) formed a distinct doctrine not till later affected by any foreign influence.

The "cameral sciences" (from *camera*, chamber, in particular the chamber in which the revenue and expenditure of the sovereign were administered) had a wider scope than the political, or "national" economy (*Volkswirtschaftslehre*) of the present day. In the narrower sense, as cameral science proper, the study comprised merely the financial administration just mentioned; in its wider sense it embraced not only the doctrines relating to the administrative measures for the public welfare, but also the technical side of production, e.g. agriculture, mining, technology, commerce, etc. The immediate object of the cameral sciences was to educate a competent staff of state officials. When absolute government was supplanted by English constitutional ideas the cameral sciences retreated in their turn before political economy as represented by ADAM SMITH. Survivals of them exist nevertheless in Germany up to the present day. Established as it was by the Golden Bull of 1356, territorial sovereignty in Germany did not attain to full development till after the peace of Westphalia (1648). Hence it was only since this last date that cameral science came forward as an independent body of doctrine. In more ancient times it is treated as a supplement to jurisprudence.

Hence also it results that the history of political economy in Germany falls into three main sections:—I. the period before the end of the Thirty Years' War; II. the interval between the Thirty Years' War and ADAM SMITH; III. from ADAM SMITH up to the present day.

I. *The period before the end of the Thirty Years' War* (1648).—Germany during the middle ages presents a state of affairs re-

sembling that of other European countries. It is only among the exponents of CANON LAW that we meet with disquisitions on economic relations. The standpoint corresponds to the theological basis of the main doctrine. Natural economics are more pleasing in the sight of God than economics based on money. The encroachments of the latter are to be opposed by severe usury laws (see INTEREST). Germany has no teacher in this line who overtops his fellows, as, for example, France has in her Bishop ORESME (died 1382).

With the approach of modern times and the victorious advance of monetary economics, a change also took place in theory. The Humanists (see HUMANISM), as adherents of absolute government copied from classic ideals, discussed the means by which that system of government, as opposed to the feudal organisation of society, could be established, putting forward views akin to the mercantilism of a later age (see MERCANTILE SYSTEM). This holds good for the *Institutio principis christiani* of Erasmus, translated under the title of *Unterweisung eines frommen und christlichen Fürsten* (1521), which is the first independent work on these matters. It is dedicated to Charles V. and culminates in the advice that a sovereign should follow a thrifty régime, and, in the event of his needing a tribute, should in the first place levy it on the goods of foreign merchants. There can be no doubt that this work was a material incentive to the scheme brought forward in the imperial diet in the winter of 1522-23 for consolidating the imperial customs. It proposed to encircle the empire, including the Netherlands but excluding Switzerland, with a customs line and a duty of 4 per cent *ad valorem* on imports and exports. The project was defeated through the opposition of the mercantile interest in the imperial towns.

The reformers, especially LUTHER, contribute with more or less discursiveness to the discussion of the economic situation, without, however, showing any marked originality. They hold a kind of middle position between the standpoint of canon law and that of the mercantilism of territorial sovereignty.

A somewhat lively literary controversy, chiefly conducted by jurists, arose towards the middle of the 16th century respecting the currency. The question whether coins should be minted at their full nominal value, or at less than their full nominal value in metal, was the apple of discord in a semi-official paper war, which became celebrated, between the two branches, Ernestian and Albertian, of the princely house of Saxony (1530). The reign of the most remarkable territorial sovereign of his time, the Elector Augustus of Saxony (1553-86), soon after gave occasion for several more important economic works, notably Von Ossa's *Prudentia regnativa* (written 1556, published

1607). More than a century later (1717) it was republished by THOMASIVS and made the basis of his economic lectures.

Special mention under this period may further be made of OBEECHT, professor of law at Strassburg, with his posthumous work (1617) entitled *Fünff unterschiedliche secreta politica von Anstellung und Vermehrung guter Policey*, etc., in which he urges the necessity of a fund of money (*erarium sanctum*) for the sovereign, and proposes to connect with it a system of fire insurance. He also discusses a special institution to provide for children (*erarium liberorum*) on almost modern insurance principles. The names of the chief originator of the so-called "*Hausvater* literature" of rural economy—T. Colerus (*Oeconomia ruralis et domestica*, 1591-1605), of the jurist T. Bornitz (*De rerum sufficientia in republica et civitate procuranda*, 1625), and of the professor of law at Tübingen and subsequently at Ingolstadt, Chr. BESOLD (*De arario*, 1620), also deserve mention, the two latter being more or less encyclopædic in treatment. A transition between this and the next period is afforded by K. KLOCK, whose book *De contributionibus* (1634), written during the Thirty Years' War, contains a detailed and rather advanced theory of taxation, in which some attempt is made to construct a progressive system.

II. *The period between the Thirty Years' War and Adam Smith* (1648-1790).—Seldom has it ever befallen a nation to experience an overthrow, both in its internal and external relations, similar to that which Germany sustained between 1618 and 1648. Prosperity was annihilated and the nation lacerated to death. The lead in politics and culture was henceforward, for centuries, surrendered to the western states of Europe. It was no easy task which confronted territorial sovereignty, the principle of which had, since the peace of Westphalia, been made one of the essential parts of the imperial constitution. The land laid waste had to be brought into cultivation again, and, for this purpose, had to be re-populated, and the state debt incurred by the war to be liquidated. Scientific skill was called in to help. The theory of administration or cameral science, which at that period was attaining its full development, thus became on one side a theory of agriculture; on another, a policy of population; on a third, a science of state revenue, or finance. And hence there grew up the composite title under which, from the beginning of the 18th century, these subjects were taught at the universities, viz. "economic, police, and especially cameral science" (*Oekonomische Polizei- und (besondere) Cameral-wissenschaft*).

The science split into two "confessions," corresponding to the religious dualism of the empire. There was a Catholic branch, group-

ing itself around the house of the Hapsburgs; and a Protestant branch, the central force of which gradually developed together with the growing ascendancy of the Hohenzollerns.

In the Catholic group the sectarian character is less prominent. It starts with J. J. BECHER (*q.v.*), whose brilliant work, *Politischer Discurs von den eigentlichen Ursachen des Auf- und Abnehmens der Reiche, Städte und Republiken*, etc. (1668), might even to-day be read with profit. Dedicated, in the second edition, to the emperor, Leopold I., it maintains that "die volkreiche und nahrhafte Gemeine," a populous and well nourished community, should be the aim of territorial administrative policy. Without the means of subsistence there is no population; the converse also holds good that without an adequate population there can be no proper means of subsistence, since human beings are dependent on each other. Hence the statesman has impartially to keep in view both these poles on which the welfare of the state turns. In so doing he must guard against the three cardinal foes of well-being, namely *monopolium* (monopolies); *polypolium* (industrial anarchy); and *propolium* (usurious forestalling). Becher's proposals for preventive organisation border more or less on socialism. He detested merchants who imported from abroad goods that may also be produced at home, and abused them roundly as the real "propolists." On the other hand, men of business who invested their capital in the promotion of native industry seemed to him the "pillars" of society. The whole political system ought to be based on true religion (Catholicism). Nevertheless the clergy has to stand within, and not without, the state, and must be subject to civil law. The development of Becher's ideas is continued by F. W. HORNECK's *Oesterreich über alles wann es nur will* (1684). One proposition in it has become celebrated, viz. "it were better to give two thalers for a commodity and keep them in the country, than to give only one which leaves the country." Horneck attaches cardinal importance to the industrial independence of his country, and especially with regard to France. To compass this he would prohibit in general all foreign manufactures, and do this without waiting till all the corresponding industries were started in the country, inasmuch as they would at once spring up out of the earth. The third of this group was W. von SCHRÖDER, author of a book dedicated to the Emperor Leopold, *Fürstliche Schatz- und Rent-Kammer* (1686). Here highest importance is ascribed to the financial interest of the ruler, which ultimately coincides with the national interest. The sentence, "that the wealth or the poverty of the country is caused, not by import and export of money, but by the equilibrium of manufacture" (*cp. lix.*), is characteristic of the writer's standpoint. This

being so, Schröder should not be termed, as he is by many, *e.g.* by ROSCHER, a strict mercantilist in the sense of confounding wealth with metallic money. There is in fact no "strict" mercantilist in this sense amongst the German cameralists.¹

The Protestant section presents a richer, if not exactly a more important, literature. At the head stands V. L. von SECKENDORFF (*q.v.*), whose work *Der teutsche Fürstenstaat* (1655) is written in a strictly Lutheran spirit. The Protestant disposition comes out yet more keenly in the later work *Der Christenstaat* (1685), which seeks to show "what things in church and state are Christian and right, and what can be reformed according to the principles of Christianity" (*i.e.* of Protestantism). Seckendorff had set himself the task of initiating young statesmen into the theory and art of government. His *Fürstenstaat* is, therefore, essentially didactic in character. The leading idea is the coincidence between the interest of sovereign and people, whom he wished to see as numerous as possible. "The greatest treasure of the country consists in numbers of well-nourished people." After he had spent the chief part of his life in the service of the Dukes of Gotha, he was appointed chancellor of the newly-founded university of Halle in the service of the Elector of Brandenburg, but died in the same year (1692). In the reign of the Great Elector of Brandenburg, Frederick William the Great (1640-1688), a violent paper controversy took place concerning the excise. It was opened by the work *Entdeckte Goldgrube in der Accise*, by Chr. Teutophilus (pseudonym for Tenzel), 1685. In it the Great Elector is extolled for keeping on foot a standing army (*miles perpetuus*) for the maintenance of his Protestant supremacy, for which the "sweet-tempered, gently-flowing excise" was a far more fitting fiscal means than the "violent levy." This advice, as we know, was not unheeded by the prince.

Cameral studies underwent an important development during the reign of king Frederick William I. of Prussia (1713-1740). Although

¹ The statement that "wealth is money" I have come across but once in the economic literature of Germany, viz. in the second of the three pamphlets concerned with the currency controversy between the two branches of the ruling house of Saxony mentioned above (1630). (See pp. 66 and 70 of the new edition prepared by W. Lotz, Leipzig, 1898.) This little tract, put together merely for controversial purposes, *Das Münz-Belagende Antwort und Bericht*, etc., is justly stigmatised by Roscher as being "strikingly ill-written" and "sophistical," and can in no case rank as representing a prevailing tendency of thought. It is much more common, in cameralistic literature, to find sentences apparently postulating identity between wealth and population. Yet it would again be incorrect to regard this view as especially characteristic of cameralism. On closer inspection the two notions, wealth and population, are found to be distinct, while they are related as reciprocally cause and effect. The wealth or well-being of the nation consists in the equilibrium, conditioned by progress, of both elements.

no friend to the university system, he held that in connection with his reorganisation of the Prussian civil service the establishment of cameralistic chairs was necessary. The professorship at Halle university was given to GASSER, till then professor of law, while that at Frankfurt on the Oder was bestowed on Dithmar the historian (1727). From the date of the latter's book, *Einleitung in die Oekonomische Polizei- und Cameralwissenschaft* (1731), the division of subjects indicated by its title remained unchanged till the time of SONNENFELS. Dithmar also was the first to start an economic journal in Germany under the title *Oekonomische Pama* (from 1729).

From this date also specialised treatises began to appear. J. R. von ROHR (1688-1742) set forth "economic" science, i.e. the theory of rural economy, in his *Compendiöse Haushaltungs-bibliothek*. Through his work *Silvicultura economica* (1713), H. C. von Carlowitz became the father of the economics of forestry. P. T. MARPERGER (1656-1730) achieved in his own writings an entire literature of commerce. The theory of population found its classic representative in T. P. SÜSSMILCH (q.v.), whose famous work, *Die göttliche Ordnung in den Veränderungen des menschlichen Geschlechts* (1742), which appeared in the reign of Frederick the Great (1740-1786), may be looked upon as the programme of that monarch as regards the politics of population. Süßmilch takes as his text the scriptural injunction, "Be fruitful and multiply." The king considered it as "un axiome certain, que le nombre des peuples fait la richesse des États."

Two side channels, one philosophical and one statistical, now flow parallel to the main stream of the Protestant branch of cameral science.

At the head of the former stands LEIBNITZ, who, in his *Bedenken von Aufrichtung einer Societät in Deutschland zur Aufnahme der Künste und Wissenschaften* (1669), expresses opinions in essential agreement with Becher's economic ideas. G. MORHOF, professor at Kiel, reviving the old Greek division of practical philosophy into ethics, politics, and economics, in his large work, *Polyhistor* (1688 and 1692), treated comprehensively of the literature and history of the last-named subject. Chr. THOMASIVS of Halle, in his popular philosophical lectures, dealt fully with economic matters, taking as his basis the writings of Ossa and Seckendorff. Political economy is specially appreciated by Chr. WOLFF, at first in his *Vernünfftige Gedanken vom gesellschaftlichen Leben der Menschen* (1721), and then in his *Economica methodo scientifico pertractata* (1754), the standpoint being throughout a moderate mercantilism.

The statistical parallel line takes its origin in the writings of the father of the history of German law, H. CONRING (q.v.) of Helmstedt (d. 1681). It is continued by G. SCHMEIZEL

(d. 1747), who included in his university lectures at Jena and Halle a *collegium politico-statisticum*, and received further development from his pupil, G. ACHENWALL (q.v., d. 1772) at Göttingen, and gained for him, though inappropriately, the sobriquet of a "father of statistics." He was followed at Göttingen by A. SCHLÖZER, the author of the well-known definition, "Statistics are stationary history, and history is continuous statistics." In contrast to the English "political arithmeticians," such as PETTY, GRAUNT, HALLEY, and others, the chief strength of his method lies not in the figures "Zahlen," but in the description in words "Wortbeschreibung." This "Staatenzustandskunde" (science of the condition of states), in its geographical aspects—is further developed by BÜSCHING (d. 1793).

It was thus that matters stood in Germany when foreign science began to exercise an influence on cameral science, which till then had moved entirely within its own national limits. The movement began in the work of the diplomatist and friend of Frederick the Great, T. F. von BIELFELD—*Institutions politiques* (1760; German edition entitled *Lehrbegriff der Staatskunst*, 1761). This, though destitute of originality, was an epoch-making book for Germany, inasmuch as it dealt with matters entirely outside the range of the cameral sciences of that day, and, as it was written in French, is exclusively based on French economic works. For the first time the German reading public became acquainted with such authors as VAUBAN, MELON, DUTOT, FORBONNAIS, etc. From that time the influence of foreign writings on cameralistic literature became permanent.

The merit of having united into one systematic whole the collected antecedent tendencies of the Catholic and Protestant sections as well as of the later foreign influences, belongs to J. H. G. von JUSTI (d. 1771). Justi had been in the employ both of Austria and of Prussia, as well as for a time in that of Hanover (Göttingen). The earliest of his principal works is *Staatswirtschaft* (1st ed. 1750); his later writings are but more comprehensive expositions of it. Justi follows in general the divisions of Dithmar, but he establishes the science of trade or commerce, as a separate sub-division to be detached from the science of political administration. To Justi can be traced the scheme, which was subsequently carried out in various places, of establishing in the German universities, not only separate chairs, but entire faculties of political economy, with six or seven professors. His saying that a state can never be over-peopled is well known. In political philosophy his model is MONTESQUIEU, with whose preference for the English constitution he is in sympathy. English economic literature, or the other hand, was almost entirely unknown to him. It was reserved for a British citizen, Sir J. STEUART

(*q.v.*), a partisan of the house of Stuart, to introduce a knowledge of it into Germany. He fled to the Continent after the battle of Culloden (1746), and for a time enjoyed the hospitality of the courts of Baden and Wurtemberg. During this period Steuart composed the celebrated *Inquiry*, etc., the English edition appearing in 1767, the German translation (in two versions), 1769. The work made a great stir, but its influence was soon weakened by the intrusion of the doctrines of the French Physiocrats.

The system of the physiocrats could find no soil so favourable as that of Germany. What proved its special attraction in that country was its metaphysical element. At many of the smaller German universities, some of which are now closed, the chair of philosophy was united to that of the cameral sciences. QUESNAY'S theories, professing to form a philosophical system based on economics, were in striking correspondence to this arrangement. Great enthusiasm arose for the *science nouvelle*, which became known chiefly through the *Ephémérides du citoyen*, published from 1767 onwards (see EPHÉMÉRIDES).

At the head of its adherents stood A. SCHLETTWEIN (*q.v.*), formerly *Privatdocent* at Jena, and in 1763 taken into the service of the Margrave KARL FRIEDRICH of Baden. Both these men entered on the experiment of introducing the IMPÔT UNIQUE (*q.v.*) into some villages of Baden (see MIRABEAU, V. R., Marquis de). The margrave, moreover, was the author of the celebrated *Abrégé des principes d'économie politique*, which was revised by DU PONT and Quesnay, and appeared in the issue for 1772 of the *Ephémérides du citoyen*. Schlettwein's zeal was equalled by that of the state secretary of Basle, Isaak ISELIN (*q.v.*) whose periodical, *Ephemeriden der Menschheit* was started in 1776 as a pendant to the Parisian organ similarly named. A prominent position among German economists belongs to the professor of military construction at Kassel, J. MAUVILLON (*q.v.*) of French descent. In his *Sammlung von Aufsätzen über Gegenstände aus der Staatskunst, Staatswirtschaft und neuesten Staatengeschichte*, published in 1776, occurs the first use of the terms "physiocrat" and physiocratic system," which were derived from the word "physiocratie," chosen by Du Pont as the title of a collection of essays published by him; Mauvillon challenged any opponents to a public contest. The glove was taken up by more than one, the first to respond being the Kassel professor, C. W. Dohm, in an article which appeared in the *Deutsches Museum* for 1778, entitled *Ueber das physiokratische System*, followed in 1780 by Von PREIFER'S *Der Anti-physiokrat*, etc. On behalf of the system then appeared K. F. FÜRSTENAU *Versuch einer Apologie des physiokratischen Systems* (1779); E. SPRINGER *Ueber das physiokratische System* (1780); also

Mauvillon's own *Physiokratische Briefe an den Herrn Professor Dohm* (1780). A middle position was taken up by G. A. WILL, *Versuch über die Physiokratie, deren Geschichte, Literatur, Inhalt und Werth* (1782). The contest, which was conducted in the most chivalrous manner, had no favourable issue for the system. Its fall was brought about less by the arguments of its opponents than by the rapidly increasing preponderance of the doctrine of Adam Smith.

Specially noteworthy among the opponents of the Physiocrats is J. von SONNENFELS (*q.v.*), professor of financial and political science at Vienna from 1763. He borrowed his arguments from Quesnay's vehement French opponent, FORBONNAIS, and entered the lists more especially against the IMPÔT UNIQUE. The belief in the desirability of the maximum increase of population, which had been, by the teaching of the Physiocrats, thrust more into the background, emerges with renewed energy in Sonnenfels. The measure of the population in a state is set, not by the means of subsistence, but by the opportunities for employment. The increase of the latter is accordingly the duty of the statesman. Sonnenfels distinguished two kinds of balance in trade, the "numerical," or monetary, balance, and "the balance of advantage," i.e. the balance of employment. The one can be active while the other is passive. If *e.g.* Austria and Portugal exchange linen to the value of £2,500,000 for diamonds to the value of only £2,000,000, the numerical balance is unfavourable to Austria, but the balance of advantage is favourable. To Sonnenfels also is due a new classification of economic subjects, indicated already in the title of his principal work—*Grundsätze der Polizei, Handlung und Finanz* (Principles of Police, Commerce, and Finance, 1st ed. 1765). The science of police was to detach the branch dealing with the measures for the public welfare, and to confine itself to the doctrines relating to the maintenance of the public safety. The former should be included in the science of commerce, by which arrangement that science is made to embrace approximately the same subjects which in our days are dealt with by political economy. What was hitherto cameral science proper became the science of finance. This is essentially the classification as now used in the German universities.

Towards the end of the 18th century political economy in Germany becomes a chaos first cleared in the 19th century by the victorious advance of the doctrines of Adam Smith. Original thinkers like Justus MÖSER went their own way, but without producing any abiding influence. Others, such as J. BECKMANN of Göttingen (*q.v.*), JUNG-STILLING of Heidelberg (subsequently of Marburg), kept firm to the old cameralistic pattern, setting forth the doctrine in its completeness, i.e. inclusive of

technical methods of production, such as the theory of rural economy, forestry, mining, technology, and trade, and for this purpose compiling countless text-books. Others again followed Sonnenfels. The remainder were divided into adherents of the Physiocrats, and adherents of Adam Smith. The teaching of the latter in particular made irresistible progress through its popularisation in the translated treatises of the French writer J. B. SAY.

Cameral science, nevertheless, as already stated, has even at the present day not disappeared from Germany. In the south German states the cameralistic career is still a separate career in the state service, and for the preparation of its candidates the universities of Munich and Tübingen have special independent economic faculties; while elsewhere the subjects in question come under the jurisdiction of the faculties of philosophy or jurisprudence. The technological branches moreover are studied at polytechnical academies, as well as at special schools for agriculture, forestry, mining, and commerce. Modern political economy in Germany shows, however, still many traces of its past. Even though the epigonous attempt of Th. SCHMALZ, professor at Berlin, to infuse new life into cameral science by infusing physiocratic doctrine into it failed (*Encyclopädie der Kameralwissenschaft*, 2nd ed. 1819), yet the manuals of RAU of Heidelberg (d. 1870) stand with one foot in the old cameral science and the other in Adam Smith's doctrine. This also holds good as to BAUMSTARK of Greifswald (d. 1889), who has been called "the last of the cameralists" (*Kameralistische Encyclopädie*, 1835). At the present time, however, during the 19th century, the Smith-Say tendency has prevailed in academic chairs and in the opinion of the public at large, and accordingly Karl Marx's assertion, quoted at the introduction to this article, respecting this period is, upon the whole, correct. During quite recent years political economy in Germany and Austria has taken an independent flight, and has exercised a most powerful influence over modern thought in other countries.

[Julius Kautz, *Die geschichtliche Entwicklung der National-Oekonomie und ihrer Literatur*, Wien, 1860.—Wilhelm Roscher, *Geschichte der National-Oekonomie in Deutschland*, München, 1874.—Gustav Marchet, *Studien über die Entwicklung der Verwaltungslehre in Deutschland von der zweiten Hälfte des 17 bis zum Ende des 18 Jahrhunderts*, München, 1885. Also the other standard works on the history of political economy.] A. O.

III. *The period from Adam Smith (1790) to the present day.*—Though the *Wealth of Nations* was translated¹ into German by Johann Friedrich Schiller (not the poet) as soon as it appeared, its influence in Germany and Austria was very inconsiderable till the end

of the century. The most enlightened university of the day was that of Göttingen in Hanover; and the *Göttinger Gelehrten Anzeigen* (10th March and 5th April 1777), while it declared the book to be of great value, pronounced against its chief conclusions, especially in regard to economic policy. The statesmen of the time, when they troubled themselves about economic principles at all, inclined to the PHYSIOCRATS, till the shock of the French Revolution discredited everything French. But in 1817 Adam MÜLLER, whose bias was against Adam SMITH, speaks of him notwithstanding as "the greatest writer of all times in political economy"; and Müller nine years before had written against him in the tone of one who recognises his great and increasing power. Under Adam Smith, he says, "the science of national economy was no longer directed to a speculative examination of the resources of the state, but to a continual increase of the same in practice." In fact the man and the book were in Germany identified with the active pursuit of wealth as an end in itself. The condition of things described in FICHTE's *Closed State* (1800), the eager competition for material riches all the world over, is regarded as Smith's ideal and aim. GARVE, the popular philosopher, had popularised Adam Smith by presenting the public with a new translation (1794), and the Scottish economist was already creating a school in Germany. He had become to economics what KANT was to philosophy. The Prussian statesmen of the war of liberation were his followers to a great extent in finance. Many professors were with him. Professor Christian Jakob KRAUS of Königsberg (1753-1807) carried his devotion even to the copying of literary peculiarities. Professor Georg SARTORIUS of Göttingen (1766-1828) departed from his master mainly in the matter of economic policy; he insisted on a number of exceptions to the principle of "natural liberty." Professor August Ferdinand LÜDER (1760-1819) at first contented himself with discursive illustration of Smith's doctrines from books of travel and statistics, with too little regard to the facts of his own country, but fell by degrees into a scepticism which was as exaggerated as his earlier faith. HUFELAND (1760-1817), LOTZ (1771-1838), SODEN (1754-1831), and JAKOB (1759-1827), were little more than intelligent popularisers. As Garve's economics were connected with the philosophy of WOLFF, the economics of Jakob were connected with the philosophy of KANT, of which he was an ardent defender. The influence of FICHTE and HEGEL on the progress of economics was slow to reveal itself.

The melancholy which accompanied the political depression of Germany in the early years of the 19th century, and which is shown

¹ This translation is in 2 vols. Vol. i. 1776: ii. 1778.

not only by Fichte's *Closed State* (1800), but by books like *Der gesunkene Menschenwerth* (anon. 1804), gave place to a manlier spirit after the war of liberation; there is an improved tone even in economics. The text-book of RAU, the Heidelberg professor (1792-1870), showed an activity of mind which was above mere reproduction of English writings, while the said writings, not only of Smith but of his successors, were really better known and better utilised than before. So important was Rau's *Lehrbuch* (1826) that it may be said to have held the field in spite of much criticism till Professor Adolf Wagner in our own time attempted to re-edit it, and then found he must re-write it. The features characteristic of German economics in its early period are not altogether absent in Rau. Economic books were largely written for the practical statesmen of Germany and not for the economic students, or even the statesmen of the world in general. Rau's book is partly written, like the old *kameralistische Lehrbücher*, for working politicians and diplomatists. But it contains also theoretical economics of a wider range; and its criticisms of the past are largely founded on really economic arguments, not as in what is called the "romantic" school largely on appeals to sentiment. At the same time it seems hardly fair to attach the name romantic to the works of men like Adam MÜLLER (1779-1829), when we consider that the romantic school in literature is on the whole in sympathy with the ideas of the French Revolution, and this "romantic school" in economics is in reaction against them.

From the peace of 1815 we may trace three lines of development in German economics, the theoretical, the historical, and the socialistic, though the lines sometimes cross each other. After Rau on the field of theory the work of Von THÜNEN (1780-1850) is most important. In *Der isolirte Staat* (1826) Von Thünen published investigations on the theory of rent substantially at one with the theory of RICARDO, but worked out independently. His conception is not, as the title might suggest, that of an ideal state, but of a theoretical simplification of the conditions of inquiry. The effect is shown, theoretically, of the distance of equally fertile zones of land from the town as their centre, when all outside influences are conceived to be removed. The influence of situation on rent is thus presented in a figure which shows how nearly the abstract method may approach the pictorial. Von Thünen himself attached even more importance to his theory of natural wages, described by him mathematically as the square root of ap where a is the necessities of life and p the product of capital and labour. Wages are not simply necessities, but should increase with the product. Von Thünen is sometimes claimed as a socialist, but his attitude was rather that of a landowner,

who was very advanced in his social programme, but could not altogether forget his own order.

HERMANN (1795-1868), the Bavarian minister, was in one respect more worthy than even Von Thünen to rank beside the great English and French economists. His *Staatswirtschaftliche Untersuchungen* (1832) cover all branches of purely economic theory, and there is hardly any part of the subject on which he has not left fruitful suggestion. Like Von Thünen, he showed how a practical man could reason abstractly, though it may perhaps be a sign of a practical bent that in his book he devotes most space to production. He makes a clear distinction between matters technical and matters economical. He dwells on "subjective" aspects of goods and wealth that were afterwards brought into prominence by the Austrian school. The distinction of consumer's capital from productive capital, and joint action from collective action, the analysis of the various elements in cost, and of employer's profits, and the relation of cost to price and to value, are very characteristic. The second half of his book is indeed largely a treatise on value, as was said of the *whole* of Ricardo's. There is perhaps no single German economic work that leaves on its readers so deep an impression of strength as Hermann's; and yet it would be hard to say in what particular his work effected a profound change in economic speculation. Until Professor Marshall paid him due recognition, Hermann's name was little known by English economists, BANFIELD being in this respect a notable exception.

Since Hermann, there has no doubt been much theoretical work done in Germany, but it has as a rule taken the shape of monographs, as of MANGOLDT on *Unternehmervergewinn*, Schäffle on *Ausschliessende Absatzverhältnisse*, or else it has occurred incidentally in the course of a treatise perhaps headed *Volks-wirtschaftslehre*, but containing more of history, statistics, and politics than of abstract reasoning. In Austria, on the contrary, excellent theoretical work of the old type is being done, and it began in a reaction against the German historical school of political economy. Between this historical school and the theoretical we may take men like LIST as occupying a midway position. After NEBENIUS (1784-1857), LIST (1789-1846) has the chief merit of persuading the states, and sections of states, to adopt free trade within their borders and a uniform tariff outwards,—to institute in other words a customs union (ZOLLVEREIN). Baden, and more effectively Prussia, led the way; and between 1828 and 1852 the Zollverein had drawn nearly all the minor states into its fold.

This movement is in many ways to be compared with the English agitation against the

corn laws and for free trade. Yet the Zollverein secured only what England had possessed for some centuries, and the United Kingdom since 1707 and 1800; there was to be free trade within, and a uniformity in the protective duties against the foreigner. List was a powerful advocate of both domestic free trade and protection against the foreigner. He agreed with COBBEN and BRIGHT in desiring that "political economy should descend from the studies of the learned, from the chairs of the professors, from the cabinets of the statesmen, into the counting-houses of the men of business, the offices of public servants, the dwellings of the landowners, the county meetings of the agriculturists,—to become the common property of all educated citizens" (*National-System*). But this must not be the ruling political economy, which deals with the whole world, as if the universal peace had been already established. Till political strife has ceased, it will be needful for political economy to be national and not cosmopolitan. A protective system will develop the "productive powers" of each several nation, and fit it better for the ultimate state of brotherhood and peace and universal free trade. Political economy should be much more the study of these productive forces than, as hitherto, the study of exchange and value. Like A. COMTE, List had his *law of the three stages*, and he made some show of justifying it from history.

List was, however, not a good representative of the rising historical school. The historical school, of which the main position is that all economical doctrine is relative to the particular epochs in which it appears, and has nothing in it permanent or true for all times, was better represented by SCHÖN, HILDEBRAND, SCHÄFFLE, ROSCHER, and KNIES. Whether it can claim descent from SAVIGNY and the jurists, or only from GERVINUS and the historians, is a question which need not be decided here. It is discussed by Prof. C. Menger (*Methode der Socialwissenschaften*, 1883, bk. iv. ch. iii.) (see HISTORICAL SCHOOL).

Since the time of Hermann some of the best work done in Germany, even in theory, has been done by adherents of this school, and this shows the elasticity of their chief principle. Schäffle has written on *Exclusive rights of State* (1867), L. von STEIN on finance and administration (1860), Knies on money (1873 *seq.*). Very significant too is the presence in such a book as Roscher's *Political Economy of the old economic discussions of capital, wages, profits, rent, and taxation*. Even the extreme section treat the theory of the currency and money as comparatively fixed and permanent, and the Malthusian law of population is so treated on the whole by Roscher, RÜMELIN, and Wagner. There are in fact at least three groups, which may be called a right, a left,

and a centre. Roscher and Schäffle, belonging to the right, use deduction freely; RÜSLER, HELD, NASSE, less often; Schmoller and Brentano would fain avoid it altogether, though (like Thorold ROGERS in our own country) they are not able to preserve complete consistency. As was said above (article A. COMTE and ENGLISH EARLY ECONOMIC HISTORY), the historical economists are really historians who have studied economics rather than economists *pur sang*; and this appears especially in the left and centre,—in the historical work of Schmoller, Ochenkowsky, and Nasse.

The difficulty of preserving the threefold classification of German economists appears when we come to deal with the SOCIALISTS OF THE CHAIR. Such a prominent writer as Professor Adolf Wagner or Professor Cohn or Professor Rümelin might find a place among either the socialists or the historical economists. The same might be said of LANGE, who has written the best book on John S. MILL yet published, Mill being known in Germany much better by his *Logic* than by his *Political Economy*. Wagner's work, besides his discussions of taxation and finance, owes much of its value to his constant sense of the bearings of law and philosophy on economical questions. He does not go so far as Schäffle and others in claiming that economics itself should be an ethical science; and his recent commendations of Marshall's *Principles* would show that he is not far from the purely theoretical point of view. In fact the division into three schools is logically defective, though practically convenient. It may serve to point out (1) the men, comparatively few in Germany, who have confined themselves mainly to abstract theory; (2) the men who, without entirely abandoning theory, have looked more to concrete economic facts, especially of past ages; and (3) the men who use both history and theory to support a political scheme—the active intervention of the state in economic movements. Instead of being exclusive, the principles of the three classes are tenable together.

SOCIALISM, as representing not only a conflict of doctrine with doctrine in universities and in the book mart, but almost necessarily a struggle with the government of the day, has had a much more exciting history than orthodox and historical economics. Fichte, who was, with reservations, a socialist (see FICHTE), contrived to avoid this political conflict; and his philosophical successors were even farther from danger. But the Hegelians of the left,—MARX, LASSALLE, Engels, more particularly,—took an active part in political agitation on the side of socialism; and their combination of political and intellectual audacity made them a formidable power.

As the school of abstract theory drew inspiration from Adam Smith and his followers,

the socialists were inspired by the writings of OWEN and READ, THOMPSON and GRAY, but not to the same extent. The influence of the French revolution of 1848, and of the corresponding movements in Germany, was probably much greater; and the intellectual armoury of the socialists was furnished very largely by RICARDO, already known to the Germans in BAUMSTARK's translation (1837).

Karl MARX, in his *Manifest* (1848) and *Lohnarbeit* (1849), maintained the doctrine that wages are, and must be, simply the cost price of living, and—though this is more clearly brought out in the *Kapital* (1867)—that the gains of capital are due to a production by the labourer for which no wages are paid. That wages mean bare necessities, and value is cost price, are doctrines that may be drawn from Ricardo with a fair appearance of reason. On this foundation Marx raises his doctrine of surplus value: it means that under threat of starvation workmen produce for the employer more than is enough for their maintenance, but this extra-product goes not to them but to him as the master of the situation. Without the imposing apparatus of illustration from English bluebooks with which *Das Kapital* is provided, Marx would not have made so strong an impression on economists. His contemporary, ROBERTUS (1805-75) had the advantage in power of hard reasoning. Like Von Thünen, he talked like Ricardo, with little or no knowledge of the English writer. He had the disadvantage of being averse from much political agitation, and not disinclined to political compromise. On the other hand, his doctrines on the subject of wages, the normal working day, and capital, are so like those of Marx that the question of priority has been often debated. The famous "iron law," so often identified with German socialism, is strictly speaking the formula of neither Marx nor Robertus but of LASSALLE, the gifted and scholarly but too rhetorical and impulsive agitator (1825-64). Lassalle organised the German socialists into a formidable political party; and it is he who is to be specially credited with the creation of state socialism (see SOCIALISM), in its modern form. He threw scorn on SCHULZE-DELITSCHE, and his attempt to regenerate society by means of co-operation; but only because he desired co-operation to be subsidised and promoted by the state itself.

The "socialists of the chair," who become noticeable, name and thing, especially after the Austro-Prussian war, are described by one of themselves, Professor Nasse, as owing something of their influence as moderate state socialists to the success of the Prussian bureaucracy at a time when it was a political necessity; and traces of the connection are readily to be seen.

The economists of the present generation may perhaps be better classed under six than under

three heads. There are (1) the "Epigoni" or successors of the old classical school, including such men as Karl Braun, Treitschke, Max Wirth, as earlier they included PRINCE SMITH and MICHAELIS. They are usually identified with the MANCHESTER SCHOOL of English politicians. They are still of considerable weight in the journals and on the platforms of the country as well as in parliament.

There are (2) the men of what has been called the "theoretical renaissance," among whom Philippovich and the mathematical economists Launhardt, Auspitz, and Lieben are to be reckoned. They are more or less closely associated with the Austrians (see AUSTRIAN SCHOOL). We can hardly count Dühring and other revivers or transplanters of CAREY's doctrines, among them; but Dietzel, though a keen critic of the Austrians, must have a place.

(3) In the third place we have the historical school with its various groups; and (4) fourth the socialists of the chair, among whom Wagner and Schmoller, and (earlier) Held, are to be included. Schäffle must have a place, though his recent writings against social democracy have accentuated the difference between his very moderate state socialism and socialism pure and simple. Samter, though sometimes reckoned *Kathedersocialist*, is almost to be reckoned among the socialists pure and simple. The latter (5) have Bebel and Liebknecht for their chief political champions. Even with his pen Bebel is by no means a mean adversary. Engels, though he lived in England, is to be reckoned as of this school, and in many respects the most powerful writer in it, though Kautsky is not far behind him. The description of the organisation of the party, and the history of its various congresses and journals, belong rather to politics than to economics. The repressive law of October 1878, which lasted above ten years, gave socialism the benefit of persecution. The social democrats of Germany polled 1,700,000 votes in 1893, and returned forty-three members to the Reichstag. The insurance laws of 1883 (sickness), 1884 (accidents), and 1889 (old age) showed that the government had determined to outbid their opponents. It is well known too that Bismarck, who was then in power, had not disdained to learn something from Lassalle. (6) The Christian socialists, under Döllinger, Bishop Ketteler of Mainz and Canon Moufang of Mainz, as Roman Catholics, and latterly Todt, Stöcker, and other Protestants, have no claim to independent economic doctrine; but as social reformers they have, like the socialists of the chair, rivalled the social democrats or socialists pure and simple, and they have contributed to socialistic politics the new element of religion.

The chief associations and journals connected more or less with economics may be mentioned briefly. The free traders have their "economic

congress" (*Volkswirtschaftlicher Kongress*) and Economic Society founded in 1858; and they have done much to remove feudal obstructions and keep the extreme protectionists in check. Something more positive was wanted, however; and in 1872 Schmoller convened a meeting at Eisenach, which issued in the institution of the union for social politics (*Verein für Sozial-politik*) (1873). The union may justly claim a share in the making of the insurance laws; and it has from the first acted in avowed rivalry with the social democrats. It meets for discussion once a year, publishes transactions, and is in many ways like the economic section of the British Association with the addition of a directly practical aim. It has included such men as Nasse, Roscher, Held, Knapp, Mithoff, Conrad, Engel the statistician, Brentano, Wagner, Philippovich, Schönberg, and Miaskowski.

The leading economic journals of Germany represent very clearly the state of economics in that country. The *Jahrbücher für National-ökonomie und Statistik* (edited by Conrad, and frequently called "Conrad's *Jahrbücher*") admit chiefly theoretical, statistical, and descriptive articles without respect of schools. The *Jahrbuch für Gesetzgebung* ("Schmoller's *Jahrbuch*") is more closely allied with law and history. The *Vierteljahrsschrift für Volkswirtschaft und Kulturgeschichte* is the organ of the free traders; the *Archiv für Soziale Gesetzgebung und Statistik* (Berlin), edited by Braun, deals chiefly with social reform, and also the *Sozial-politisches Wochenblatt*, formerly brought out by the same editor. The *Zeitschrift für Sozial-und Wirtschafts-geschichte* (Freiburg) is the organ of the purely historical economists. Some of Professor Oncken's best historical work has appeared there. The *Zeitschrift für die gesamte Staatswissenschaft* (Tübingen) has been edited by Fricker, Schäffle, and Schönberg, and is fairly catholic. The most temperate and valuable of the socialistic periodicals is *Die Neue Zeit* (Stuttgart). Good economical writing is frequently to be found in the *Preussische Jahrbücher* and *Göttingische Gelehrten Anzeigen*, while it occasionally happens, though more seldom than in England or America, that important articles on economic subjects find their way into journals that are printed for the general reader. In Germany, more than elsewhere, the writing of elaborate articles on economical or social topics has come to be regarded as a kind of condition precedent of a government appointment; and the result is a tendency towards over-production of such articles (see BOUNTIES).

The production of books on economical subjects goes on also without ceasing; but as yet economic theory, if not neglected altogether, is treated by most writers very eclectically, and economics may be more truly described as being in a state of transition in Germany than

in England or America. This is shown not only by the minute divisions of schools, which recall the political particularism of old Germany, but by the variety of points of view adopted in such a collection of economical treatises as Schönberg's *Handbuch* (1882) or in such a work as the *Handwörterbuch der Staatswissenschaften*, completed 1894 under the editorship of Conrad, Elster, Lexis, and Loening.

It ought to be added that among the valuable monographs published in Germany in the present generation, not a few, like those of Lange, Hasbach, Walcker, and Leser, deal with English economists; and the intercourse between English and German economists was probably never so close as it is now. This is the more welcome as the conditions of life in the two countries are tending to become more and more similar, and the same problems will face the thinkers and legislators in both of them. The influence on economical speculation of the condition of the particular country where it is carried on is always considerable. It is not by accident that the weight of economic opinion in Germany is in favour of Malthus and in France against him. The success, too, or failure of particular social schemes, as co-operative banking, or labour colonies, has helped to influence the views of the learned concerning theoretical possibilities. The same kind of lesson has been taught by the changes in currency. The adoption of a gold standard, after the war of 1870, has led to an active discussion of questions of currency; and the effects that followed the change have made German economists cautious in their theoretical decisions on the subject of the standard. A commission was convened in 1894, but brought no such thorough sifting of opinion in the matter, such as was effected two years before in Austria (1892) by the great currency commission. It remains to be said that the change, so far as it introduced a uniform coinage throughout the German empire, is admitted on all hands to have been a valuable reform.

[Held (Adolf), *Prinzipienstreit in der National-ökonomie*, 1872 (from *Preussische Jahrbücher*, July 1872).—Cohn (Gustav), *Fortnightly Review*, Sept. 1873, "Political Economy in Germany" [written with too evident a bias], and *History of Political Economy* (pub. by American Acad. of Pol. Science, 1894).—Roscher (Wilhelm), *National-ökonomik in Deutschland* (1874) (an English summary is given by Ingram, *History of Pol. Econ.*, 1888, pp. 184 seq.).—Cliffe Leslie, T. E., *Fortnightly Review*, July 1875, a review of Roscher, reprinted in *Essays in Political and Moral Philosophy*, 1879, pp. 167 seq., under the title "The History of German Political Economy."—Contzen (Heinrich), *Geschichte der Literatur und Bedeutung der Nationalökonomie oder Volkswirtschaftslehre*, 1881 (2nd ed.) [somewhat didactic].—Resch (Peter), *Geschichte der*

deutschen Nationalökonomie im 19ten Jahrhundert (1889) [too meagre].—Eisenhart (Hugo), *Geschichte der Nationalökonomik*, 2nd ed., 1891 [the best general history].—Nasse (Erwin), *Quarterly Journal of Economics* (Harvard) i. (1886), 498 seq.—Cossa (Luigi), *Introduction to the Study of Pol. Econ.* (Eng. transl., 1893), pp. 399 seq.—Rae (John), *Contemporary Socialism* (2nd ed., 1891) "The Economic Movement in Germany."—Dawson (W. H.), *German Socialism and Ferdinand Lassalle*, a biographical history of German socialistic movements during this century, 1888, and *Germany and the Germans*, 1894.—Schmoller (Gustav), *Zur Litteraturgeschichte der Staats- und Sozialwissenschaften* (1888) (On Fichte, List, Carey, Stein, etc., down to Hertzka and Menger).—Hasbach (Wilhelm), *Economic Journal*, i. 509 seq. (Sept. 1891), "Recent Contributions to Economic History in Germany."—Philippovich (Eugen), *Quarterly Journal of Economics*, v. pp. 220 seq. (January 1891), "The Verein für Sozialpolitik." A good account of the new insurance laws is in the *Forum* for October 1889, by Prof. Taussig: who also gives a good account of the theory of wages as it has developed in Germany since Hermann, *Quarterly Journal of Economics*, Oct. 1894. In the *Edinburgh Review* for Sept. 1828, there is an article by McCulloch headed "Prussian Political Economy;" but it is a mere review of a French translation of Schmalz's *Political Economy*, and notes the free-trade doctrines of that physiocratic Epigonus, without any general survey of his contemporaries. For other remarks on modern German school, especially on Wagner, see Marshall's, *Principles of Economics*, 3rd ed. vol. i.] J.B.

GERSON, JEAN CHARLIER DE (1263-1429), of the village of Gerson near Rheims, the famous chancellor of the university of Paris, contributed in the wide range of his written sermons and tractates to the theological economics of scholasticism. He is especially interesting as one who by his breadth of view and eminent gifts of piety and statesmanship, was drawn in opposite directions when dealing with economic ethics, now upholding the scholastic theories of "divine and natural law" (see *JUS DIVINUM, HUMANUM, NATURALE*), now driven to compromise by the teaching of experience; forced to conclude that the former might, because of the hardness of men's hearts, never be so imperative as not to permit the advisableness, and sanction the validity, of some less absolute code of civil rules. Thus in his sermon *De reddendo debito* he approves of the assize of "wine and bread and the like," inasmuch as no amount of sermons, or multiplication of preachers would ever be sufficient to correct the fraudulent and excessive prices demanded by self-perjuring tradesmen. Again Usury is repeatedly and utterly condemned by him as contrary to divine and natural law, essentially bad and not to be made good. Yet he admitted its contingent benefits, approved of a legal (low) rate of usury as likely to check abuse of it, and at the council of Constance, when a sweeping measure to abolish usury was called

for, he quashed the motion by demanding that a distinction between a fair and a usurious contract should first be made out.

The *Tractatus de Contractibus, de Venditione, et Emptione* contains essentially his contribution to the analysis of EXCHANGE together with his chief disquisition on usury. In it he describes the various forms of contract, and defines it as a kind of mutual justice and a legitimate exchange of property, not to be condemned because the bargain may incline to the relatively greater advantage now of buyer, now of seller. He discusses also the function of the state in relation to contracts, recognising its right to modify them, but resenting multiplication of statutes and penalties as an intolerable yoke. Against usury he adduces the usual arguments, scriptural and classical. He also endeavours to prove that, since to use money is to consume it, none but the owner of it can use it. Hence the "iniquity of the usurer" in receiving back what has ceased to be his, and more into the bargain, or rather "out of the bargain." And generally it is rather the mutual injustice imputed to lending on interest that moved Gerson. Taking advantage of the credulity of the buyer, or the urgency of his need, is to him usurious business equally with receiving money *ultra sortem* (i.e. as interest). And in the "accidental" circumstance of a *commutativa justitia* attending lending at interest he saw grounds for mitigating his condemnation. The loan might avert ruin or crime in the case of the borrower. Hence it might be tolerated, "lest a worse thing befall us." In all cases the decision lay between the "dual tribunal of intrinsic and extrinsic conscience, the one of the church, the other of secular politics."

[Charlier de Gersonii, *Opera*, Parisiis, 1606, esp. vol. ii.—Funk, *Geschichte des kirchlichen Zinsverbotes*, Tübingen (Universitätschriften), 1876.]

C. A. F.

GHENT, HENRY OF (1217?-93), schoolman, born in that city at the commencement of the 13th century, was the son or descendant of a tailor. He was educated at Tournai, where he was a canon in 1267, and archdeacon in 1278. He was known as "Doctor Solemnis," and besides many theological and metaphysical works, is believed to have written *Quodlibetum de Mercimoniis et Negotiationibus*, of which the only copy in MS. was formerly in the abbey of St. Val Sainte Marie near Valenciennes (Val. Andreae, *Bibliotheca Belgica*, London, 1643, p. 345). This book is now lost, but Cossa considers that the author appears to have shown in it "a somewhat juster understanding of commerce, its lawfulness and utility, than most of his contemporaries" (Cossa, *Introduction*, etc., 2nd ed. Eng. Translation, p. 147).

[F. Huet, *Recherches sur Henri de Gand*, 1838. —B. Haureau, *De la Philosophie Scolastique*, t. ii.—*Histoire Littéraire de la France*, t. xxii.,

1842, pp. 144-203.—F. Ehrle, *Recherches critiques sur Henri de Gand*, 1887.—N. de Pauw, *Dernières découvertes concernant Henri de Gand*, 1889.]

H. R. T.

GHETTI, LUDOVICO, was one of the humanist philosophers who flourished in Florence and Tuscany during the 15th century. Ghetti applied himself to finance, and the system of taxation, a problem much discussed at that time in Florence, where very different methods had been tried.

"Savonarola, the Christian reformer, was in favour of the rating of real property; Guicciardini gives a scheme for levying taxes on a sliding or proportionate scale" (Cossa, *Introduction to Pol. Econ.*, translation, p. 156). Ghetti advocated the IMPÔT UNIQUE (q.v.).

[For the history of the influence of the humanists on political economy, see Cossa, *Introduction to Pol. Econ.*, translation, p. 157.—And for fuller detail, Toniolo, E., *Scolastica ed umanismo nelle dottrine economiche al tempo del risorgimento in Toscana*, Pisa, 1887.]

A. B.

GIANNI, FRANCESCO MARIA (1728-1821) born at Florence. His works on economics do not mark any progress in science, but his great reputation rests on his sagacious co-operation in the great economic reforms of Leopold II. of Tuscany. In carrying these out, perhaps assisted by a study of the works of BANDINI, he advocated free trade in corn. This step, proposed after 1756, led on to complete free trade in grain and food in Tuscany (1767).

In his *Meditazione sulla teoria e sulla pratica delle Imposizioni e Tasse pubbliche*, Gianni considers custom-houses as means to obtain the equilibrium and sometimes a surplus on the balance of international trade; but when he speaks of the grain trade, with a singular contradiction he evinces himself a regular free-trader. Firm in his opinions, after having triumphed in the liberal reforms of 1767, he opposed by several *Memorie* the edict of 1792, which deprived Tuscany of its free government.

He maintains that liberty alone can produce prosperity, and trade needs no restraints to enable it to thrive, as clearly shown in Tuscany during twenty-four years.

Gianni did not write a treatise on this question; even in his *Memorie Speciali*, which deal with the subject, he never discusses theory as FABRONI did, but his arguments are supported by facts, which render them far more convincing.

[Gianni's *Memorie*, his speeches, and other writings are carefully collected in the *Raccolte degli Economisti toscani* (Firenze, 1847-49, 4 vols.) which contain Gianni's and Fabroni's works.]

A. B.

GIBBONS, JAMES SLOAN (19th century), was born in Wilmington, Delaware, in 1810. He was a merchant in Philadelphia, and removed to New York in 1835, where he became identified with banking interests. He wrote *Banks of New York, their Dealers, the Clearing House, and the Panic of 1857*, New York, 1859 (reprinted

1870), pp. 399. Gibbons gives in this a detailed and vivid description of the administration of banks, and discusses the causes of the panic of 1857, attributing it to the expansion of bank credit. He also wrote *The public Debt of the United States: its Organisation; its Liquidation; Administration of the Treasury; the Financial System*, New York, 1867, pp. xii. 276, in which he condemns the loose administration of the national finances, and the heavy taxes upon labour.

D. R. D.

GIFT in its modern sense means a voluntary transfer of property. According to Roman law an agreement to make a gift may be a valid contract, but English law does not enforce promises of that nature unless made by deed under seal. On the other hand English law does not restrict the power to deal with property by way of gift, while Roman law and some modern systems of law contain such restrictions. According to French law a person leaving on his decease one child or other descendant may not dispose of more than one-half of his property by way of gift, and if he leaves two children or other descendants his gifts may not exceed one-third (if three or more, one-fourth) of his property (*Code Civil*, art. 913). An English donor need not consider the claims of his family, but the law to a certain extent protects his creditors, inasmuch as it allows gifts to be set aside in certain cases, either by virtue of the provisions of the Bankruptcy Act or under one of the statutes of Elizabeth against voluntary conveyances (see LEGISLATION, ELIZABETHAN; DONATIO MORTIS CAUSA).

E. S.

GIGINTA, MIGUEL DE (16th century), a canon of Elna in Roussillon, and author of several works on the treatment of the poor: *Tratado de Remedio de Pobres* (A Treatise on the Remedy for Poverty), Coimbra, 1579; *Exhortacion á la Compasion de los Pobres*, Madrid, and Saragossa, 1584; *Cadena de Oro del Remedio de los Pobres* (A Golden Chain of the Remedy, etc.), Perpignan, 1584; and *Atalaya de Caridad* (A Watchtower of Charity), Saragossa, 1587. In a *Memorial* approved by the cortes of Madrid in 1586, and inserted by Don Firmin Iglesias in his *Beneficiencia en España* (Madrid, 1876, vol. ii. p. 1169, Appendix ix.), Giginta insists upon the necessity of establishing *Casas de Misericordia* (Houses of Mercy) to be kept distinct from hospitals for the sick. The test of labour was to be applied under penalty of a diminution in the allowance of food. As the stubborn poor will thus be impelled to leave the house, the author hopes that charitable persons will deny all help to such vagrants, and reserve their alms for the well-conducted poor duly appointed by the house to collect alms at the gates of churches, or market-places, etc. The houses of mercy were thus to be supported by pious donations and foundations. The cortes

petitioned King Philip in favour of this scheme, but with scanty success.

[*Iglesias, Beneficencia en España* (vol. i. p. 256).—Colmeiro, *Historia de la Economía Política en España* (vol. ii. p. 37).] E. Ca.

GILBART, JAMES WILLIAM (1794-1863), was of Cornish descent, though born in London. He was at first in a London bank, until it stopped payment in 1825; in 1827 he went as manager, first to the Kilkenny, and afterwards to the Waterford branch of the Provincial Bank of Ireland. On the formation of the London and Westminster Bank in 1834, Gilbert became its manager. He did much to secure the successful establishment of joint-stock banks. In 1836 the Bank of England procured an injunction against his bank "prohibiting their accepting any bills drawn at less than six months after date." Gilbert evaded the difficulty by inducing the country banks corresponding with the London and Westminster to draw bills upon it "without acceptance." Gilbert also gave evidence before various parliamentary committees, and secured the insertion of a clause in the renewal of the Bank Charter Act in 1844, granting to joint-stock banks the power "to sue and be sued by their public officers," and also the right of accepting bills at less than six months' date. He became F.R.S. in 1846. Much of his leisure was devoted to the promotion of literary and scientific institutions among the middle and working classes. He was the author of several useful works on banking—the principal treatises being devoted to familiarising the public with the methods and advantages of banks. He also wrote on logic. He bequeathed a sum of £1250 to King's College as an endowment for an annual course of lectures on banking. The *Gilbert Lectures* were commenced in 1872, and are continued to the present time.

Gilbert's works, besides some essays, are (the dates applying in all cases to the first edition):

A Practical Treatise on Banking, 1827.—*History and Principles of Banking*, 1834.—*History of Banking in Ireland*, 1836.—*History of Banking in America*, 1837.—*An Inquiry into the Causes of the Pressure on the Money Market in 1839*, 1840.—*The London Bankers*, 1845.—*Lectures on the History and Principles of Ancient Commerce*, 1847.—*Logic for the Million*, 1851.—*Elements of Banking*, 1852.—*The Laws of the Currency*, 1855.—*The Moral and Religious Duties of Public Companies*, 1856.—*Logic of Banking*, 1859.—*Social Effects of the Reformation*, 1860. An edition of Gilbert's works was issued after his death, London, 6 vols. 1865, but it does not include all the above-mentioned works.

[*Dictionary of National Biography*; Biographical Notice prefixed to the collection of Gilbert's works, 1865.] R. H. H.

GILBERT, THOMAS (1720-98), son of Thomas Gilbert of Cotton, Staffordshire; barrister in 1744; land agent to Lord Gower,

M.P. for Newcastle-under-Lyne, 1763-68; and Lichfield, 1768-95, wrote on Poor Law Reform; promoter of GILBERT'S ACT (*q.v.*).

GILBERT'S ACT. The act 22 Geo. III. c. 83, for the better relief and employment of the poor, was commonly known as Gilbert's Act, from the name of its proposer, who represented Lichfield in parliament. The preamble states that the sufferings and distress of the poor are great from two causes, viz. (1) the incapacity of overseers, who misapply funds and favour litigation; (2) the want of proper regulation and management of workhouses. To remedy these evils it makes the following changes in the law. The provisions of 9 Geo. I., which had allowed of the union of small parishes for certain purposes, are extended. Parishes, not more than ten miles apart may combine together, when two-thirds of the ratepayers assessed at £5 and upwards desire it, may build a common workhouse, and borrow money on joint credit. In all such cases, the churchwardens and overseers are released from the duty (imposed by 14 Car. II. c. 12) of relieving the poor, but continue to be responsible for the collection of the rate. The relief of the poor is entrusted to three persons nominated by the justices of the peace, viz. the guardian, who represents his parish at the monthly board, and may be paid up to £10 yearly; the governor, who is charged with the management and discipline of the workhouse; the visitor, who inspects the workhouse, checks accounts, and is generally charged with supervision. In all parishes, whether incorporated or not, the workhouse is to be used only for the aged, sick, and infirm. Able-bodied labourers are to be found work, and the wages they earn to go towards their maintenance. In any case in which the guardians refuse relief, an appeal may lie to the justices.

The act was repealed by the act 34 & 35 Vict. c. 116. It was avowedly an experiment, and contained the germs of much good and much evil. Under the former head we may put (1) the enlargement of the area of administration, a principle made general in 1834; (2) the attempt to improve the status of administrators; (3) the permission to board out children. Under the second (1) the large powers given to the justices, which were soon abused; (2) the granting of relief in aid of wages, which developed into the allowance system (see ALLOWANCE SYSTEM); (3) the practical abolition of the workhouse-test imposed by 9 Geo. I.

In 1834, when the POOR LAW was remodelled, there were 67 incorporations under this act containing 924 parishes; in 1853, 14 containing 203; all have now disappeared.

[Nicholls, *History of Poor Law*, vol. ii. ch. xi. —Aschrott, *The English Poor-Law System* (Engl. trans.) pt. i. § 5.—Fowle, *The Poor Law*, English Citizen series.] L. R. P.

GILDS.

Early History, p. 209; Religious Gilds, p. 210; The Gild Merchant, p. 210; Craft Gilds, p. 211; Gilds of Newcastle-upon-Tyne, p. 218; Gild System in Spain, p. 218.

Early History.—Mediæval gilds were voluntary associations established for mutual assistance. Various theories have been advanced concerning their origin. Some writers, especially Coote and Lambert, regard them as a continuation of the Roman *collegia* and *sodalitates*. There are certainly striking analogies between Roman and Germanic fraternities, but there is little evidence to prove their unbroken continuity of existence.

A more prevalent theory derives gilds wholly or in part from the early Germanic or Scandinavian sacrificial banquets, or drinking bouts. Brentano, Hegel, Wilda, and others, ascribe considerable influence to this heathen element. Sacrifice and banquet are indeed two of the earliest meanings of gild; but when a word has a variety of meanings, and may therefore refer to different things, those things have not necessarily an historical connection. It matters little whether the earliest signification of gild is sacrifice, expiation, penalty, feast, or payment; the solution of the question of verbal derivation does not necessarily affect the origin of gild in the sense of fraternity or society. The heathen sacrificial carousals lack two of the most essential elements of the later institution, namely, corporative solidarity, or permanent association, and the spirit of fraternal co-operation or Christian brotherhood. This last conception included a mixture of worldly and religious ideals—the support of the body and the salvation of the soul.

Another theory has recently been advanced by Dr. Pappenheim. He ascribes the origin of Germanic gilds to the northern "foster-brotherhood," or "sworn-brotherhood,"—an artificial bond of union generally between two persons, sometimes between more than two. After the performance of peculiar ceremonies, such as the intermingling of their blood in the earth, the contracting parties grasped hands, and each took the oath of brotherhood, swearing to avenge any injury done to the other. We cannot here state all the objections to this view (see Hegel, *Städte*, i. 250-253). It will suffice to say that the foster-brotherhood seems to have been unknown to the Franks and the Anglo-Saxons, the nations in which mediæval gilds first appear; and hence Dr. Pappenheim's conclusions, if tenable at all, apply only to Denmark or Scandinavia.

No theory on this subject can be satisfactory which wholly ignores the influence of the Christian church. Imbued with the idea of the brotherhood of man, the church naturally fostered the early growth of gilds, and tried to make them displace or absorb the old heathen banquets. While conceding the influence of

Christianity upon the early development of gilds, we must not, however, ascribe their origin to this source. The work of the church was directive rather than creative. Gilds were a natural growth of civilisation, a natural manifestation of the associative spirit which is inherent in mankind. The same needs produce similar associations in different ages. While all such associations have striking resemblances, those of each age have peculiarities which indicate a spontaneous growth. It is not necessary to seek the germ of gilds in any antecedent age or institution. When the old kin-bond—the *maegth* or *sippe*—was dissolving, and the state was still undeveloped, individuals naturally united for mutual help.

The earliest references to gilds are found in the Carolingian capitularies of 779 and 789, and in the enactments made by the synod of Nantes, early in the 9th century, which last are repeated in the ecclesiastical ordinances of Hincmar of Rheims (A.D. 852). There are also vague references to sworn associations of some sort in the capitularies of 805 and 821. The Carolingians, like the Roman emperors, seem to have regarded such unions as dangerous to the state. The gilds of Norway, Denmark, and Sweden are first mentioned in the 11th, 12th, and 13th centuries respectively; those of France and the Netherlands in the 11th. In England they are not clearly referred to before the second half of the 9th century, though many writers believe that they were already in existence in the reign of Ine. We have little information concerning Anglo-Saxon gilds before the 11th century. To the first half of that century belong the statutes of the fraternities of Cambridge, Abbotsbury, and Exeter—the oldest gild ordinances of Europe. The object of the thanes' gild at Cambridge was to provide for the payment of the *werfeld*, in case a member killed any one, and to afford help in blood-feuds. In Orey's gild at Abbotsbury, and in the brotherhood at Exeter, the religious element is more prominent, the chief object of the brethren's solicitude being the salvation of their souls. The fraternity at Exeter also extended assistance in case of conflagration. Feasting, prayers for the dead, attendance at funerals of members, the solemn entrance oath, fines for neglect of duty and for unseemly behaviour, contributions to a common purse, mutual assistance in distress, the gild-hall, periodical meetings—in short, all the characteristic features of later gilds already appear in the statutes of the Anglo-Saxon fraternities. Continental historians have made conjectural data concerning Anglo-Saxon gilds the basis of important deductions regarding the origin of municipal government throughout western Europe. Hence it is important clearly to sum up all that is known concerning this whole subject. The following three pro-

positions seem incontrovertible. (1) In the second half of the Anglo-Saxon period the gild is a well-known institution, but its prevalence has been greatly exaggerated. (2) There is no evidence to show that there was any organic or official connection between gilds and municipal government, much less that the latter emanated from the former. (3) There is no trace of the existence of either craft or merchant gilds before the Norman Conquest. Commerce and industry were not yet sufficiently developed to call for the creation of such associations.

It is difficult to classify gilds. We have already indicated the three chief classes: religious or benevolent, merchant, and craft or artisan gilds. Those thus far specifically mentioned belong to the first category. The last two categories, which do not become prominent anywhere in Europe until the 12th century, had, like all gilds, a religious tinge, but their aims were primarily worldly. They are, furthermore, distinguished from religious fraternities by being generally confined to a particular occupation or class of persons. We must now examine the later history of religious gilds, and then pass to the other two categories.

Religious Gilds.—After the Norman Conquest religious gilds multiplied in England. They were particularly numerous in the boroughs. Their ordinances and customs were similar to those of the above-mentioned Anglo-Saxon fraternities. The brethren were aided in old age, sickness, and poverty, often also in cases of loss by robbery, shipwreck, and conflagration,—for example, the gild of St. Katherine, Aldersgate, assisted any member if he “falle in povert, or be aneantisid thorwz (through) elde or thorw fyr oder water, theves or syknesse.” Alms were often given even to non-gildsmen; lights were supported at certain altars; feasts and processions were held periodically; attendance at funerals of brethren, and at masses for the dead, was required. Some such functions appear in the ordinances of all kinds of gilds, but they are especially prominent in those of the religious brotherhoods. Some of these fraternities came to be closely connected with the municipal government; but, as a rule, they were simply private societies with a limited sphere of activity. They played an important rôle in the social life of England, especially as eleemosynary institutions, down to the time of their suppression in 1547. Religious gilds also flourished on the continent throughout the middle ages, and closely resembled those of England.

The Gild Merchant.—Students of political science are particularly interested in merchant and craft fraternities. The gild merchant came into existence in England soon after the Norman Conquest, as a result of the increasing importance of trade. Whether it was of indigenous growth or a transplantation from Nor-

mandy, it is difficult to determine. Until clear evidence of foreign influence is forthcoming, it may be safer to regard it simply as a new application of the old gild principle. But this new application may have been stimulated by continental example. The evidence seems to indicate the pre-existence of the gild merchant in Normandy, though it is not mentioned anywhere on the continent before the 11th century. It spread rapidly in England, being regarded by the townsmen as one of their most important chartered privileges; in the reign of John it was a well-known institution common to many English boroughs. But in some prominent towns it did not exist, notable examples of its absence are found in London, Colchester, Norwich, and the Cinque Ports. The smaller the town in which it existed the more conspicuous was the rôle it played. Its chief function was to regulate the trade monopoly conveyed to the borough by the royal grant of *gilda mercatoria*. The gildsman had the right to trade freely in the town, and to impose payments and restrictions upon others who desired to exercise that privilege. The ordinances of the fraternity thus aim to protect the brethren from the commercial competition of strangers or non-gildsmen. More freedom of trade was allowed at all times in the selling of goods by wholesale; and also in retail dealings during the time of markets and fairs. The ordinances were enforced by an alderman with the assistance of two or more deputies, or by one or two masters, wardens, or keepers. At the *morwenspeches*, or periodical meetings of the society, there was feasting and merry-making, new ordinances were made, members admitted, officers elected, and other business transacted.

Many writers assert that the gild merchant and the borough were identical, and that the former was the basis of the whole municipal constitution. But the records in the local archives show clearly that gild and borough, gildsmen and burgesses, were originally distinct conceptions; and they continued to be discriminated in most towns throughout the middle ages. Admission to the society was not restricted to burgesses; nor did the brethren form an aristocratic body controlling the whole municipal government. No good evidence has, moreover, been advanced to prove that this or any other kind of gild was the germ of the burghal constitution. On the other hand, the gild merchant was certainly an official organ or department of the borough administration; and its influence upon the economic and corporative growth of English municipalities was considerable.

The early relations of the craftsmen and their fraternities to the gild merchant are not clearly indicated in the meagre sources at our disposal. Many artisans seem to have been

admitted to the mercantile fraternity. They bought raw material and sold the manufactured commodity; hence they were regarded as merchants; no sharp line of demarcation was drawn between the two classes in the 12th and 13th centuries. Separate societies of craftsmen were formed in England soon after the gild merchant; but at first they were few in number and of much less importance than the general mercantile fraternity. The origin of the former is not to be attributed to the latter; there was seemingly no organic connection between the two classes of gilds, though many artisans probably belonged both to their own craft fraternity and to the gild merchant, and the latter, owing to its great power in the town, seems to have exercised some sort of supervision over the craftsmen and their societies. When any single body of artisans, such as the weavers or tanners, received from the king the right to have a gild, they secured the monopoly of working and trading in their branch of industry. Thus, with every creation of a craft fraternity the gild merchant was weakened, and its sphere of activity was diminished, though the new bodies were subsidiary to the older and larger fraternity. The greater the commercial and industrial prosperity of a town, the more rapidly did this process of subdivision into craft gilds proceed, keeping pace with the increased division of labour. In the smaller towns, in which agriculture continued a prominent element, few or no craft gilds were formed; and hence the old gild merchant remained longest intact and powerful in that class of boroughs. The period of the three Edwards constitutes an important epoch in the history of industry and gilds. With the rapid development and specialisation of industry, particularly under Edward III., craft fraternities multiplied and grew in power, many master craftsmen became wealthy employers of labour, dealing extensively in the wares which they produced. The class of dealers or merchants, as distinguished from trading artisans, also greatly increased, and established separate fraternities. When these various unions of dealers and of craftsmen embraced all the trades and branches of production in the town, little or no vitality remained in the old gild merchant; it was deprived of its independent sphere of activity. In short, the function of guarding and supervising the trade monopoly had become split up into various fragments, the aggregate of the crafts superseding the old gild merchant. A natural process of elimination, the absorption of its powers by other bodies, had rendered the old organisation superfluous. This transference of authority from the ancient general gild merchant to a number of distinct bodies, and the consequent disintegration and decay of the former, was a gradual spontaneous movement, which, generally speaking, may be assigned to the 14th

and 15th centuries, the very period in which the craft gilds attained the zenith of their power. As the present writer's views on this subject appear to have been misinterpreted, it may be well to add that the gild merchant did not give birth to craft fraternities or have anything to do with their origin; nor did it delegate its authority to them. The development was one of slow displacement, or natural growth and decay, due to the play of economic forces.

The history of the English gild merchant is mainly of antiquarian interest. In some places it long survived either as a religious fraternity, shorn of its old functions, or as a periodical feast, or as a vague term applied to the whole municipal corporation. In most towns the name and organisation disappeared toward the close of the middle ages, and the institution was represented by the aggregate of the crafts.

The mediæval gild merchant played a less important rôle on the continent than in England. On the continent it occupies a less prominent place in the town charters and in the municipal polity, and generally corresponds to the later fraternities of English dealers, established either for foreign commerce or to regulate a particular part of the local trade monopoly. Its place in the civic government was in such cases similar to that of many later craft associations.

Craft Gilds.—The bond of union in a craft gild was at first that of common occupation; a craft fraternity comprised all the artisans in a single branch of industry in a particular town. In the 15th and 16th centuries "mystery" and "company" were the most common names for craft societies, though the old term "gild" continued to be used. Craft gilds first appear in England and on the continent early in the 12th century. Their origin was similar to that of the gild merchant; it was occasioned by the expansion of trade and industry, which increased the number of artisans. In banding together for mutual protection they simply followed a natural tendency of the age. It is not necessary to elaborate any more profound theory regarding the origin of these societies. As the trade of England continued to expand in the 13th century their number increased. In the 14th they were fully developed and in a flourishing condition; by that time each branch of industry in every large town had its gild.

The members elected officers who were most commonly called wardens. The chief function of the latter was to supervise the quality of the wares produced, so as to secure honest and excellent workmanship. Hence the hours of labour and the terms of admission to the society, including apprenticeship, were regulated. Members were also expected to make periodical payments to a common fund, and to participate in certain common religious observances, festivities,

and pageants. But the regulation of industry was always paramount to social and religious aims; the chief object of the fraternity was to supervise the processes of manufacture and the monopoly of working and dealing in a particular branch of industry. The organisation and the aims of the craft societies of the continent were similar to those of England.

There was at no time a general struggle in England between the gild merchant and the craft guilds, though in a few towns there may have been some friction between merchants and artisans. There was no conflict in England like that between these two classes in Scotland in the 16th century. Nor is there any close parallel in England to the great continental revolution of the 13th and 14th centuries, by which the crafts threw off the yoke of patrician government and secured more independence in the management of their own affairs and some participation in the civic administration—in certain cases even a monopoly of the latter, the civic constitution being remodelled with the craft fraternities as a basis. Such a conflict was easily avoided in a country where royalty was potent enough to suppress local dissensions and to exact obedience from the towns, and where borough government was mainly democratic until the 15th century. True, there were popular uprisings in England; but they were generally class conflicts between the poor and the rich, the crafts as such seldom taking part in these tumults. While many continental municipalities were drifting from an aristocratic to a more democratic *régime* in the 14th century, those of England were drifting in the reverse direction, toward oligarchy, toward government by a close "select body." As a rule the craft guilds obtained no paramount influence in the boroughs of England, but continued to be subordinate to the town government. Whatever power they did secure, whether as potent subsidiary organs of the municipal polity for the regulation of trade, or as the chief or sole medium for the acquisition of citizenship, or as integral parts of the common council, was, generally speaking, the logical sequence of a gradual economic development, and not the outgrowth of a revolutionary movement by which oppressed craftsmen endeavoured to throw off the yoke of an arrogant patrician gild merchant.

With the expansion of commerce and industry in the 14th century, though the organisation of most crafts was not greatly changed, two new kinds of fraternities appeared, and in the 15th century they became more prominent, namely, the merchants' and the journeymen's companies. The misteries or companies of merchants traded in one or more kinds of wares. They were pre-eminently dealers, who sold what others produced. They are not, however, to be confused with the old gild merchant, which originally comprised both merchants and

artisans, and had the whole monopoly of trade in the town. The company of merchants was, in most cases, simply one of the many craft unions, or misteries, which superseded the gild merchant.

The appearance of journeymen, or yeomen, fraternities marks a differentiation or cleft within the ranks of some particular class of artisans, a conflict or divergence of interests between employers, or master artisans, and workmen,—an organised struggle which foreshadows modern strikes. The journeymen combined to protect their special interests—rates of wages, etc. But in most cases the new English fraternities, after struggling a while for complete independence, seem to have become subsidiary and affiliated organs of the older craft guilds. The movement assumed large proportions on the continent, and probably was wide-spread in England, though the published sources give us little information concerning the subject.

One more phenomenon in connection with the organisation of crafts is of considerable interest, namely, their tendency to amalgamate, which is occasionally visible in the 15th century, and still more frequently in the 16th and 17th. Several fraternities—old guilds or new companies—with their respective cognate or heterogeneous branches of industry and trade, were fused into one body. In some towns all the crafts were thus consolidated into a single fraternity; in this case a body was reproduced which regulated the whole trade monopoly of the borough, and hence bore some resemblance to the old gild merchant. It is interesting to observe that already in the 14th century a similar tendency toward the union of crafts is visible in some continental cities, notably in the Netherlands and in Westphalia.

A notable feature in the history of guilds during the Tudor period was the policy of the crown to bring them under public or national control. Laws were passed, for example in 1503, requiring new ordinances of crafts to be approved by the justices of assizes; and the authority of the companies to fix the prices of wares was thus restricted. The statute of 5 Elizabeth, c. 4, also curtailed their jurisdiction over journeymen and apprentices.

The statute of 1547 (1 Edward VI.) did not suppress the craft fraternities. They were expressly excepted from its general operation. Such portions of their revenues as were devoted to definite religious observances were, however, appropriated by the crown. The revenues confiscated were those used for "the finding, maintenance, or sustentation of any priest or of any anniversary, or obit, lamp, light, or other such things." Professor Ashley aptly calls this "the disendowment of the religion of the misteries." Thus Edward VI.'s statute marks no break of continuity in the life of the com-

panies or craft fraternities. But signs of decay had already begun to appear even before the Reformation, and these multiplied in the 16th and 17th centuries. The old gild organisation was breaking down under the action of new economic forces; its dissolution was due especially to the appearance of new industries, organised on a more modern basis, and to the extension of the domestic system of manufacture. The companies gradually lost control over the regulation of industry, though they still retained their old monopoly in the 17th century, and in many cases even in the 18th. The mediæval form of association was incompatible with the new ideas of individual liberty and free competition, with the separation of capital and industry, employers and workmen, and with the introduction of the factory system and mechanical improvements.

In the second half of the 18th century many craft fraternities still survived, but their usefulness had disappeared. Oblivious of their duties to the community, and intent only on self-interest, they had become an unmitigated evil. "They were," as Dr. Held aptly remarks, "ruins which hindered the building of new edifices; the old stones could not even be used in the new structures." There seems to be no evidence of lineal descent or organic connection between them and trades unions. The privileges of the old fraternities were not formally abolished until 1835; and the substantial remains or spectral forms of some are still visible in other towns besides London.

[Wilda, *Gildengesellen*, 1831.—Fortuyn, *De gild-
arum historia*, 1834, especially for Holland.—
Pappenheim, *Alt-dienliche Schutzgilden*, 1835.—
Hegel, *Städte und Gilden der germanischen Völker*,
1891.—Toulmin Smith, *English Gilds*, with
Brentano's introductory essay on *The History and
Development of Gilds*, 1870.—Von Ochenkowski,
Englands wirthschaftliche Entwicklung, 1879.—
Gross, *Gild Merchant*, 1890.—Ashley's *Economic
History*, bks. i.-ii. 1888-93, contains the best
general account of English craft gilds. The follow-
ing works are also useful: W. Cunningham,
Growth of English Industry and Commerce, 1890-
1892.—Walford, *Gilds*, 1888.—Salvioni, *Gilde
Ingresi*, 1888.—Seligman, *Mediæval Guilds*, 1887.—
Lambert, *Two Thousand Years of Gild Life*,
1891.—Levasseur, *Histoire des classes ouvrières en
France*, 1859. There is a bibliography of German
gilds in Schönberg's *Handbuch der politischen
Oeconomie*, vol. ii. 3rd ed. 1890, and a bibliography
of French gilds in *Parliamentary Papers*, 1884,
vol. xxxix. pt. v. p. 390. See also CORPORATIONS
OF ARTS AND TRADES, especially for continental
gilds.—A. Doren, *Untersuchungen zur Geschichte
der Kaufmannsgilden*, 1893.] C. GR.

GILDS OF NEWCASTLE-UPON-TYNE. At Newcastle the ancient gilds have survived probably more distinctly than in most other cities of England. Three of the most important of them, the Merchant Adventurers, the Hoastmen, and the Masters and Mariners, have a cor-

porate existence under royal charters. The Merchant Adventurers claim to represent the merchant gild granted to Newcastle by King John in 1215. They received their charter of incorporation in 1546 from Edward VI. under the name of the Merchant Adventurers of Newcastle-upon-Tyne, and the benefit of the charter is confined in express terms to merchants inhabiting Newcastle-upon-Tyne, who then belonged to the Society of Merchant Venturers in the parts of Brabant beyond the seas—a title by which the London Company of the Merchant Adventurers of England, who had branches at Newcastle, Yarmouth, and other maritime towns, were then known. Both before and after receiving the charter, they controlled, as a merchant gild, the foreign and domestic trade of the town. They were subdivided into three distinct fellowships: the drapers or merchants of woollen cloth, the mercers or merchants of silk, and the boothmen or merchants of corn. The Hoastmen, a gild for loading and disposing of coal and stones, were incorporated 1600 by Queen Elizabeth. The Masters and Mariners were incorporated 1536 by King Henry VIII.

Of the other existing gilds, about twenty-nine in number, two or three claim a corporate existence under early charters from the crown, but most of them are unincorporated fraternities constituted by ordinances granted to them by the borough corporation of Newcastle-upon-Tyne. In most of the companies the members no longer follow the trades or occupations designated, and in none of them do the companies exercise any control or influence over these trades or crafts; they principally exist to administer the property they have inherited or acquired. The stewards of the companies are the statutory representatives of the freemen of Newcastle, in whom the exclusive right of grazing the town moor, locally called the "eatage," is still vested.

[Some information as to these gilds may be found in Walker and Richardson's *Armorial Bearings of the Incorporated Companies of Newcastle-upon-Tyne*, 1824.—Brand's *History of Newcastle*, 1789.—Brown's *Short Account of the Customs and Franchises of the Freemen of Newcastle*, 1823.—Gibson's *Newcastle-upon-Tyne Improvement Acts*, 1881, and in *Extracts from the Records of the Merchant Adventurers of Newcastle-upon-Tyne*, published by the Surtees Society in 1895.—Mackenzie's *History of Newcastle*, 1827.—Walford on *Gilds*, 1888, which contains a chapter on Newcastle gilds.]

GILD SYSTEM IN SPAIN. GREMIOS or CRAFT-GILDS arose in Spain during the middle ages under the influence of the same causes as in the rest of Europe. Each separate kingdom of the Spanish monarchy had its own separate laws on the subject, but in all it was strictly kept in hand by the royal prerogative. In Barcelona alone, the *gremios* were exclusively

subordinate to the municipal authorities, even in matter of statutes and legislation, and the royal judges had no jurisdiction over them.

The first opposition against the exclusiveness of the *gremios* arose in Aragon towards the end of the 17th century, but the general opinion remained favourable to their existence for a century more, notwithstanding the striking abuses to which they had given rise. Thus in 1763 the five *Gremios Mayores* of Madrid (silkwavers, clothiers, hosiers, grocers, and jewellers) succeeded in farming the royal revenue and in founding a privileged company, trading with its own vessels and owning factories in different parts of Spain. The *Gremios* preserved a legal standing up to 1834, although in 1775 CAMPOMANES (q.v.) had already proposed their reform in his *Discurso sobre la Educacion Popular*, and, ten years later, JOVELLANOS (q.v.) advocated their suppression in his report on the liberty of industry (*Informe sobre la libertad de las Artes*) submitted to the general council of commerce.

[Colmeiro, *Historia de la Economia Politica en España*, vol. ii. pp. 237-251. For the regulations of the *Gremios Mayores* see LARRUGA, *Memorias Politicas* (1787), vol. i. pp. 105-169 and 283-314.]

E. Ca.

GIOGALLI, SIMONE (17th century), though not an economist, holds a distinguished place in the history of economic doctrine in Italy. He was a clever Venetian merchant, highly esteemed for a memoir presented to the board of enquiry for trade of the Venetian republic.

When consulted as to the causes of the falling away of the trade of Venice, once so prosperous, and the remedies for this, Giogalli presented the paper mentioned above (*Scrittura inedita di Simone Giogalli, negoziante veneto del sec. xvii*. Venezia, 1856), containing principles of economic liberty.

Giogalli's ideas certainly do not go beyond the narrow boundaries of his republic, but his aim was to foster the commerce of Venice through liberty, in order to establish competition with other markets. However far this was from an international free trade, it is remarkable considering that monopoly, privileges, and heavy taxes were then the basis of national economic government.

A. B.

GIOJA, MELCHIORRE (1767-1829), born at Piacenza, died at Milan, studied first theology, then mathematics, economics, and statistics, to which last he applied himself steadily. The political vicissitudes towards the end of the last and the beginning of the present century involved his life: he was imprisoned several times, held and lost various positions, including that of director of the statistical office at Milan under the French; and on returning to that city after a short exile his writings were his sole means of support.

Gioja's works are on public economy, statistics, morals, education, and logic. "He could work hard, and his knowledge was extensive. Analysis was his strong point, but not criticism, where he

showed himself captious and unbridled. Not a few of Gioja's observations are equally subtle and original, particularly in his theory of the association of labour of various kinds; but once get him with one of his tabulated statements in hand, and he is the very genius of pedantry" (Cossa, *Introduction to Pol. Econ.*, translation, p. 488). Gioja's greatest work, *Nuovo prospetto delle scienze economiche* (serie i. "Teoria." Milano, 1815-17, vols. i.-iv.) sums up what had been written on *economics, finance, and administration*: he opposed the price fixed for bread by authority (*calmieri*), and favoured large properties; he preferred the arts to agriculture, great manufactures to small ones, great merchants to small merchants, and large towns to small ones.

But while Gioja partly adopted the teaching of the English economists, he contributed to hinder the progress of economic science by a narrow harsh system of protection and government interference, in support of which he wrote *Discorso popolare sulle manifatture nazionali e tariffe daziarie dei commestibili ed il caro prezzo del vitto*, Milano, 1802.

Still he deserves praise for his acute observations on the theory of *associazione dei travagli*. He studies there all the advantages derived from these, justly considering them a cause of improvement in production. He also initiated with CUSTODI and ROMAGNOSI the *Annali universali di Statistica* (1824-1871), continued by Sacchi, which form one of the best collections of economic, statistical, and social studies which Italy can boast of. Among the many works of this author, besides the numerous writings in the *Annali* and his economic papers of local interest may be noted:—*Del merito e delle ricompense*, etc., Milano, 1818.—*Filosofia della Statistica*, Milano, 1826.—*Indole, estensione e vantaggi della Statistica*, Milano, 1809.—*Logica Statistica*, Milano, 1808.—*Tavole Statistiche*, etc., Milano, 1808.

A. B.

GIRARDIN, ÉMILE DE (1806-1886), born and died at Paris, was a man who carried everything to extremes. An unscrupulous speculator, an original and impartial thinker, a devoted friend, active in business, eminent as a man of letters, and constantly seeking notoriety, he loved discussion above all things, though it should only end in paradox. He was proud, rash, brave, and chivalrous. The natural son of Alexander Comte de Girardin, he accepted his lot in life with courage, almost glorying in it. He was appointed inspector-general of the *Beaux Arts* in 1828. Two years later he founded the journal *Le Voleur* afterwards *La Mode*. After the revolution of 1830 he warmly took up the cause of cheap periodical literature. This of all the acts of his life was the one which brought him the best deserved reputation.

He proposed to Casimir Périer to apply that system to the *Moniteur universel*, then the official journal, and to reduce its price to one sou. The minister refused, with a smile of contempt—he was not far-sighted enough to perceive what a force the cheap press might become. Girardin, repulsed by him, founded

the *Journal des connaissances utiles* at the price of four frs. a year. This obtained 130,000 subscribers. He next became the champion of savings banks, freely spending his own money, though he was then not wealthy, to encourage them. Next he established the *Musée des familles*, a periodical which was a formidable competitor to the *Magasin pittoresque*. After founding other periodicals, he plunged into such speculations as the mines of Saint Bérain. After this Girardin commenced his first important attempt to establish a cheap daily paper. On the 1st July 1836, *La Presse* appeared, a journal costing forty frs. a year, while all the other great newspapers were charging eighty frs. Success attended this bold enterprise. It brought on, however, a duel with Armand Carrel, in which Girardin had the misfortune to kill his opponent. He made a vow never to fight a duel again, this last had been his fourth, and, whatsoever the provocation, kept his oath. In 1834 he became a deputy, and retained his seat till 1848. He professed at that time to belong to no political party, and to be attached to no form of government, declaring himself on different occasions in favour of absolute liberty. The revolution of 1848 came on, and notwithstanding all that he had said he took up a side, warmly professing confidence in the new order of things. But this state of feeling did not last long. He was annoyed at not being elected a member of the constituent assembly, and was embittered by an illegal imprisonment which he suffered. He sacrificed his political sympathies to his personal animosity against General Cavaignac. He took an active part in the presidential elections of the 10th December 1848 in favour of Louis Napoléon Bonaparte, who knew his character so little that he omitted to appoint him one of his ministers—ministerial position being at this time the height of Girardin's ambition. The unsteadiness of his principles and the force of public opinion drove him into isolation—the undisciplined character of his mind retained him in that condition. At last a district of the department of the *Bas-Rhin* sent him to parliament only a short time before its violent dispersion. The second of December drove him into exile, whence he speedily returned, connected himself again with *La Presse*, left it, returned to it, quitted it again, then bought the newspaper *La Liberté*. His fertile pen revived the prosperity of that journal. Shortly after this Girardin got into favour at court and was named a senator, unhappily in time to urge his country into the war of 1870 so fatal for France. He then founded the paper *La France*, supported the government of Thiers, and energetically attacked Marshal MacMahon. The last ten years of his life were scarcely less active than those which had preceded, but the public paid no further attention to him.

Among the great mass of his works a good many

were concerned with political economy, the following being the more important: *De l'instruction publique en France*, 1838.—*De la liberté du commerce et de la protection de l'industrie*. Letters exchanged between Ad. Blanqui and Émile de Girardin, Paris, 1846-47, 8vo.—*L'abolition de la misère par l'élévation des salaires*, 1850, 8vo.—*L'impôt*, 8vo, 1853. In this last work he declared himself in favour of a single tax, which he proposes to make the basis of an insurance against those risks which disturb owners in the enjoyment of their possessions.—*Questions administratives et financières*, 1858. A. C. F.

GIUSTINIANI, D. BERNARDO, was a priest (17th century). He is known in connection with a dispute as to lawful and unlawful forms of exchange. The application of the then existing theories of the canonists on usury led to difficulties in the new contracts entered into by dealers in the different kinds of exchange. According to the canonists, profit on exchange was lawful, provided it was real and did not conceal usury. The *cambio colla rincorsa*, as it was called, which Padre Giustiniani opposed, was practised in order to conceal usury. He describes it thus: "Titius, an inhabitant of Genoa, requires 1000 scudi, and asks Cajo, a money-lender, to supply them; saying to him, 'Arrange this for me on bills on Piacenza.' This is done as follows:—Cajo writes to his agent in Piacenza telling him to pay the sum to himself, crediting himself and debiting Titius, and after computing the charge to remit the debt and credit to Genoa—and thus it is done." In this manner money was borrowed in the kingdom of Naples, and as much as 30 per cent per annum paid. Giustiniani shows clearly that all this is merely a semblance of an exchange operation entered into to conceal a loan of money on usury. Some money-lenders even told him that they did not really send letters of exchange, but only made notes in their books. Starting from the principle, prevalent in those days, that usurious loans of money are wrong, Giustiniani's reasoning is sound. *Breve trattato delle continuationi dei Cambi*, Genoa, 1619.

[Gobbi, *L'economia politica negli Scrittori italiani del Secolo XVI.-XVII.*, Milan, Hoepli, 1889.] U. R.

GLANVILL, RANULF (died 1190, at the siege of Acre), sheriff, judge, and chief justiciar, 1180, under Henry II. He fought for the king against the Scots in the rebellion of 1174; in 1185 he took the cross, which perhaps accounts for his being deprived of the justiciarship on the accession of Richard I. He took a large part in carrying out Henry's legal and judicial reforms, especially in organising the *Curia Regis*—the later king's bench. A collection of the laws of England was drawn up by him (Hoveden, end of 1180), and he wrote a treatise, *De Legibus et Consuetudinibus Regni Angliæ*, which "deals principally with procedure or the mode of

enforcing legal rights, but incidentally also with the rights themselves" (Digby, *Real Property*, 68). Incidentally therefore, apart from the invaluable information concerning the legal practice of the time, much light is thrown upon the tenure of land through all classes, and upon the status, both legal and economic, of the serfs. If his account is too much coloured by legal theory and maxims of the Roman law, giving no hint of the variety of rights and customs ascertained by historical research, Glanvill remains valuable as the earliest writer who has left any definite description of the land economy of his time.

[Roger of Hoveden (Stubbs), ii. Pref. xxii. and iii. Pref. xxiii.—Kate Norgate, *Angevin Kings*, ii. 279 and notes.—Extracts in Stubbs's *Select Charters*, and Digby's *Hist. of the Law of Real Property*.]

E. G. P.

GLEBE LAND. Church land. The endowments of the church have consisted mainly of land from very early times: to each parish church belonged a number of pieces of land varying in size and position according to the nature of the soil and the manner of cultivation, and these have been added to by more recent gifts. The word glebe, which meant simply farm, has become restricted in meaning, and now means land belonging to a parish church, which the parson may farm himself or let for a short term of years, forming, with tithes, etc, the endowment of the church.

[Jacob's *Law Lexicon*.—T. M. Dale, *Clergyman's Legal Handbook*, London, 1858.—Canon Isaac Taylor in *Domesday Studies*, London, 1888.]

A. E. S.

GLOCK or GLOCKE, see KLOCK, KASPAR.

GLUT is a name (cp. glutton) given to abundance by those who, for any reason good or bad, look on it as pernicious.

An unusual abundance of a particular commodity often reduces its price so much that it is injurious to the interests of those who produce the commodity for sale, i.e. in order to exchange it for other commodities. These persons accordingly say that there is a glut, or that the market is glutted, whenever there is so much of the commodity they sell that it cannot be disposed of at prices fairly remunerative to them. Purchasers on the other hand merely say that the commodity is plentiful and cheap.

Ricardo (Principles, ch. xxi., in *Works*, p. 176), following J. B. Say (*Traité*, L. i. ch. xv.) and James Mill (*Commerce Defended*, p. 81), denies the possibility of a "universal glut"—a glut, that is, of all commodities taken together simultaneously. Malthus, following Sismondi (*Nouveaux Principes*, L. iv. ch. iv.), holds in his *Political Economy* (p. 353 ff.) that a "general glut" is possible, and in his *Definitions* (p. 247) he says "a glut is said to be general when either from superabundance of supply or diminution of demand, a considerable mass of com-

modities falls below the elementary costs of production." [For a discussion of this question see DÉBOUCHÉS, THÉORIE DES; OVER-PRODUCTION.]

E. C.

GODFREY, MICHAEL (d. 1695), brother of Sir Edmundbury Godfrey, was a financier and closely connected with Paterson in the formation of the Bank of England, of which he became the first deputy-governor in 1694. Macaulay states that he was one of the ablest, most upright, and opulent of the merchant princes of London of his day. He appears also to have been connected with Heathcote and PATERSON in their opposition to the monopoly possessed by the East India Company. Godfrey was killed in the trenches before Namur, whither he had been sent to the king in reference to money matters. His death caused a fall of two per cent in the price of bank stock. He was author of *A short account of the Bank of England*, London, 1694. The formation of the bank called forth strong opposition, and this tract of twelve pages was written in its defence, pointing out the advantages to be derived from it, especially as regards the lowering of the rate of interest throughout the country, and answering the objections made by its opponents. These, according to Godfrey, were chiefly goldsmiths and others who foresaw that their exorbitant gains were likely to be reduced.

[Thorold Rogers, *The first nine years of the Bank of England*, Oxford, 1887.—Macaulay, *History of England*.—Saxe-Bannister, *Writings of William Paterson*, 1859, vol. ii.]

R. H. H.

GODIN, JEAN BAPTISTE ANDRÉ (1817-1888), was born at Esquéhéries, Aisne, France, and died at Guise, Aisne, after a life of beneficent activity as a captain of industry. The son of an artisan, he was but poorly educated, and in his twelfth year left school to join his father in the ironworks. At seventeen he started on a tour of France as a journeyman. The industrial revolution and the ideas of FOURIER and SAINT SIMON combined to dissatisfy him with the wages system as he saw it, and he determined that if ever he rose to be an employer of labour he would endeavour to raise the level of the workman's life and make it more pleasant and less laborious. In 1837 he returned to his native village, and after his marriage in 1840 opened a small factory for apparatus for heating, with one or two assistants. Employing the process of casting for portions of stoves, etc., not hitherto made in that way, he soon succeeded in increasing his business, until in 1846 he employed some thirty hands, and found the lack of communication at Esquéhéries becoming a serious drawback. He therefore removed his factory to Guise, on the river Oise. At the time of Godin's death in 1888 the annual output of his works exceeded in value four millions of francs (£160,000), of which nearly one half was

paid out for wages to upwards of one thousand workpeople.

Godin proved a model employer. His constant solicitude for the comfort of his workmen, with whom he kept in the closest touch as their colleague rather than their master, exhibited itself in his encouragement of benefit and insurance and co-operative societies, his establishment of free schools, nurseries, libraries, theatres, clubs, etc. in his social palace or *FAMILISTÈRE*, founded in 1859, and in the gradual introduction of a system of profit-sharing, developing through industrial partnership into a co-operative company on a broad basis, which should continue to work smoothly even after its founders had personally passed away. This well-built and well-organised *CITÉ OUVRIÈRE* offers many collective facilities for comfort and enjoyment rarely within the reach of individual workmen elsewhere; and the solidarity of its members in their social and industrial relations constitutes a guarantee of continued stability.

After the revolution of 1848 Godin subscribed £4000 (at that time the third of his fortune) towards the ill-starred expedition of *Considérant* to form a Fourierist community in Texas. The failure of this expedition was in some sense a disillusion to Godin. With his more practical intelligence he laid the plans of his own *Familistère*, and successfully carried them out. In 1870 he was elected *conseiller-général* by the republican party, and as president of the municipal commission of Guise, during the military occupation of that town by the Germans, he inspired it to refuse to pay any contribution to the victorious army—a refusal which the Germans were unable to overcome. In 1871 Godin was elected deputy for his department, and remained a member of the Chamber till 1876, when he withdrew from practical politics to devote the rest of his life to the management of the *Familistère*, the publication of its journal, *Le Devoir*, and the elaboration of his industrial and political ideas in the writings mentioned below. In 1882 he was created a knight of the legion of honour. In 1886 he married his second wife, who had for twenty-five years acted as his secretary, and has since edited his posthumous work, *La République du Travail et la Réforme Parlementaire*, 1889.

The other principal writings of Godin are: *Solutions Sociales*, 1871.—*La Richesse au Service du Peuple*.—*Les Socialistes et les Droits du Travail*.—*La Politique du Travail et la Politique des Privileges*.—*La Souveraineté et les Droits du Peuple*.—*Mutualité Sociale*, 1880.—*Le Gouvernement: ce qu'il a été, ce qu'il doit être*, 1883. In these works he exhibits the bold and original qualities which distinguished him as a man of affairs, but shows the limitations of an untrained mind. He proposed the abolition of inheritance by intestacy, except by direct descent, and graduated death-duties rising from 1 per cent on £80 or less to 50 per cent on

£200,000, the state devoting the proceeds to the payment of its expenses, to the exclusion of all other forms of taxation. By this means he considered all members of the community would be provided with equality of opportunity. He urged peace between nations, and between the industrial classes of a nation, the latter result to be attained by the legal association of masters and men into groups of common interest.

[See the articles *CITÉ OUVRIÈRE* and *FAMILISTÈRE*, and the works there referred to.] H. H.

GODWIN, WILLIAM (1756-1836), author of *Enquiry concerning Political Justice*, London, 1793, 4to, the 2nd edition with material alterations, 1796, 8vo. The great doctrine of the treatise was declared by Godwin himself, *Thoughts on Dr. Parr's Spital Sermon*, 1801, to be the perfectibility of man. The characters of men are blanks, which their external circumstances, and, above all, political institutions, fill in. Justice is a general appellation for all human duty. Government is an evil, but necessary; "it finds our rights invaded, and substitutes an invasion less mischievous for one that is more so." It is perpetuated "by the infantine and unreflecting confidence of the many"; but its action should be circumscribed within narrow limits. Society can only declare and interpret, it cannot enact. Private property in the labour of others is unjust, but is not therefore to be violently uprooted. Still, the goal must be complete equality of conditions. In treating of the benefits of a system of equality, Godwin is confronted with the objection from the principle of population. His answer is the conjecture of Franklin that "mind will one day become omnipotent over matter." The speculations of Godwin—in the essay on "Avarice and Profusion" in *The Enquirer*, 1797, 8vo—provoked the *Essay on Population* (see MALTHUS). In the *Thoughts on Dr. Parr's Spital Sermon*, pp. 54-77 are devoted to the essay, but, at that time, the main proposition of the argument appeared to Godwin "no less conclusive than new." He only complained of the limitation of the checks to misery and vice, so that the inclusion of the prudential checks, in later editions of the essay, may be in part due to Godwin. As time went on, however, and the views of the essay became more generally adopted, the attitude of Godwin grew more hostile, until in 1820 he published his work *Of Population*, which had taken two years in writing, and which purports to be a complete refutation of the essay.

[Godwin's argument will be found ably criticised in Mr. Bonar's *Malthus*, London, 1885, pp. 364-371; see also *William Godwin*, etc., by C. Kegan Paul, 2 vols. 1876; and the article in the *Dictionary of National Biography*, vol. xxii. p. 64, by Leslie Stephen.] H. E. E.

In his *Enquirer*, a series of essays (1797), there is an essay on "Riches and Poverty"

(pt. ii. essay i.), in which amongst other things Godwin maintains that one evil result of poverty is the absence of leisure entailed on the poor man. He looks forward to a time when the economy of resources, better division of labour, and better division of wealth. will make it unnecessary for any one to give more than one-tenth or even one-twentieth part of the labour now bestowed on the earning of a livelihood (cp. MORE, OWEN).

Another essay, on "Avarice and Profusion," deals with the question of luxury in the manner of Tolstoi. If the rich would relieve the poor, they must share their labour, not by inventing new luxuries set the poor new tasks. Human wants need to be diminished rather than increased. Equality is always Godwin's chief aspiration. A third essay, on "Beggars," is adverse to indiscriminate charity as creating professional beggars, "the most abject thing upon the face of the earth"; but the course of the author's reflections on this matter does not run smooth. He insists that our feelings of humanity demand some indulgence.

Anarchism has never, on the whole, been so consistently, so patiently and so peaceably worked out into its details as in Godwin's *Political Justice* (1793). The use of violence in any form, even in penal laws, is absolutely condemned. The spread of intellectual enlightenment is to work the whole change. War is treated as due to the too limited intercourse between individual citizens of one nation and those of another, governments and diplomatists having too much power (cp. COBDEN).

Yet Godwin's allusions to the economists are not complimentary. He refers to the famous example of division of labour in the *Wealth of Nations* (pin-making), only to sneer at it; "The division of labour, as it has been developed by commercial writers, is the offspring of avarice" (*Pol. Justice*, vii. viii.).

At a later period of his life, when Malthus seemed to have convinced even Godwin's friends, the *Essay on Population* naturally became the object of Godwin's special enmity. With the aid of his friend Booth, he attacked its principles and its figures with all the force he could muster. The geometrical and arithmetical ratios are rejected. The increase in the American population is declared to be exceptional. He sums up his reasoning in three arguments:—

(1) Population in many states is not increasing at all; (2) every new improvement enables the two ratios to start at par; (3) the excess must begin with the infants, and infants need comparatively little food and give us fair warning. Positively he contends that in all cases where there is excess the cause lies in political institutions (Godwin, *Population*, 1820, pp. 435 seq.). He was too sanguine in believing he had routed his opponent; many admirers of the *Political Justice* and Caleb Williams, will regret that the

author of these remarkable books should have written so much that was of little merit.

J. B.

GOGEL, ISAAC JAN ALEXANDER (1765-1821), born at Vugt (North Brabant), member of a business house at Amsterdam, played a great part in the revolutionary and French period of 1795-1815, being a warm adherent of the patriotic (anti-Orangist) party. He was the head of the department of finance, first from 1798-1801, then under the Pensionary Schimelpenninck (1805), under King Louis Napoleon (1806-1808), and the French government (1810-1813), when he was also a member of the French *Conseil d'Etat*. After the restoration he undertook a manufactory of blue at Overveen near Haarlem, and lived there until his death (1821). He was an economist especially in a practical sense. The present Dutch system of taxes is to a large extent his work. His ideas on this subject may be learned best by studying that system itself as it existed in the years 1805-1810, and his work: *Memoriën en Correspondentiën betrekkelijk den Staat van 's Rijks geldmiddelen* (Memorials and Correspondence on the State of the Finances of the Kingdom), written by the order of King William I., first published 1844, by the author's son. His principles are these: Taxes should be proportional to the wealth of the contributors, and to the measure of protection they stand in need of. Direct taxes are to be preferred to indirect, the latter being only allowable for fiscal ends, and to draw contributions from the less wealthy classes. Yet he is an opponent of an income-tax because he does not believe in the possibility of obtaining the necessary information. The mode of levying ought to be simple, the laws clear; he recommends few functionaries, centralisation, and special judges.

When a director of the Amsterdam loan-bank (1801), he proposed the creation of a general bank of issue and deposit, intended to be a private concern under government control. This plan was strongly opposed, but a few years later (in 1814) it became the basis of the charter granted to the Netherland Bank.

Gogel was a staunch adherent to the rule of *laissez-faire* in matters of trade and commerce. He disapproved of duties on articles of export, e.g. tobacco, in opposition to the Emperor Napoleon I., and vigorously opposed a measure proposed by Louis Napoleon containing a new regulation of gilds (1808).

A. F. v. L.

GOLD

Gold as consumed in Industry, p. 218; Gold as Standard, p. 220; Gold Bullion, as a Commodity at the Mints, p. 224; Gold, Distribution and Production of, p. 225; Gold Certificates, p. 226; Gold Notes, p. 226; Gold Points in Foreign Exchanges, p. 226.

GOLD, AS CONSUMED IN INDUSTRY. Gold was probably employed for ornament before

it came into use as money, although in the earliest records the monetary use is mentioned as much as the other. Its application to ornamental purposes was probably very ancient. There are instances of its having been applied to industrial purposes among savages who were unacquainted with iron and other metals. Its employment in the arts, so far as our records go, appears to have originated in the east, probably in India. It is now chiefly used for watch-cases, chains, rings, and other articles of jewellery; for plate and similar ornaments; for gilding, as gold-leaf and wire; in dentistry, etc., etc.

It is very difficult to form an estimate of the amount used for purposes other than coinage; and in all serious calculations of this quantity no opinion is expressed as to the requirements of Asia. A very great deal of gold is undoubtedly consumed in the arts in India, more, probably, indeed, than in any other single country. Mr. S. Pixley estimated very tentatively, in giving evidence before the Gold and Silver Commission in 1886, that £5,000,000 of gold were annually exported to India for this purpose alone; but as the total annual imports of gold into India are now less than that sum, there is doubtless some over-estimate here.

As regards former centuries, JACOB has endeavoured to arrive at an approximate idea of the proportion of the precious metals applied to industrial uses; but we have no means of judging how far he was correct, even for the time when he wrote. He considered that the proportion of the precious metals (gold and silver) applied to purposes other than coin was one-tenth of the whole quantity produced in the 16th century, and one-fifth in the 17th; while he concludes that in the 110 years, 1700-1810, "the quantity of gold and silver which was converted into other objects than coin amounted to two-thirds of that which was left in Europe, after the part which was conveyed to Asia is subtracted from the total produce of the mines." But Jacob's estimate of the quantity of gold annually consumed in industry about 1830 is undoubtedly much too high, although he was at considerable pains to make careful inquiries. A better estimate is that of A. von HUMBOLDT, who supposes the European consumption in 1824 to have been about 9200 kilogrammes.

The only official inquiries on this subject are those instituted in recent years by the director of the United States mint. In that country a return is now annually furnished by the state and by private firms of the amount of gold used for industrial purposes. A certain amount, estimated recently at from \$1,500,000 (£300,000) to \$3,500,000 (£700,000), is then added as the value of coin melted down by jewellers and others for repairs and similar requirements. The whole amount appears by these returns to have increased considerably of late years,

being about \$11,000,000 (£2,200,000) in 1880, \$19,000,000 (£3,800,000) in 1892, and \$135,000,000 (£27,000,000) in 1903. But these estimates are considered by English statisticians to be too high.

For the civilised world—*i.e.* Europe and the United States—the best estimates are undoubtedly those of the late Dr. A. SOETBEER. These are based on careful computations, and are deduced mainly from official returns of the quantities stamped by government in each country, these quantities being subjected to various corrections, and estimates being made of the amount which escapes stamping, or which is old material melted down, etc. His estimates are, for the period 1831-40, about 18,000 kilogrammes annually, and, in 1871-80, about 84,000 kilogrammes annually, while he puts the whole quantity of gold used in industry during the period 1831-1880 at 2,070,000 kilogrammes. These are the net quantities—*i.e.* a deduction has been made on account of old material remelted, but gold melted from coin is included. For 1883 he considers the gross consumption to have been 110,000 kilogrammes, less 20,000 kilogrammes for old material, or 90,000 kilogrammes net. Since then the requirements have still further increased, and the net consumption, following Soetbeer's calculations, must be put, in 1890, at between 100,000 and 120,000 kilogrammes. It is impossible to say how much of this represents coin melted down. In making the above calculations Soetbeer accepts the estimate of the director of the United States mint for that country. English economists generally hold Soetbeer's figures to be slightly too high, this being possibly due to his incorporation of the American values.

As regards the quantities consumed in different countries, Soetbeer gives the following (annual average, about the year 1885):—

	Gross Use.	£ mill.	Subtract for old Material.	Net Use.	£ mill.
	kg.		per cent.	kg.	
United States	21,700	2.71	10	19,530	2.44
Great Britain	20,000	2.50	15	17,000	2.12
France	21,000	2.62	20	16,800	2.10
Germany	15,000	1.87	20	12,000	1.50
Switzerland	15,000	1.87	20	10,500	1.31
Holland and Belgium	3,200	.40	20	2,560	.31
Austria-Hungary	2,800	.35	15	2,400	.30
Italy	6,000	.75	25	4,500	.56
Russia	3,000	.38	20	2,400	.30
Other countries (Europe)	2,300	.29	..	2,000	.25
Total	110,000	13.75	..	89,600	11.20

No opinion can be given of the stock of gold actually in existence in a form other than bullion or coin.

A point still to be considered is, what proportion do these quantities bear to the whole amount of gold annually produced? According

to the statement of the United States Mint Report, combined with the earlier estimates of Dr. Adolf Soetbeer, the value of the production of gold in the world since 1860 is £1,600,000,000. It is estimated that 30 per cent of this, £480,000,000, is employed in the arts and industry. Deducting this, we have a value of £1,120,000,000 to be added to the coinage of the world to the year 1907.

The weight of this is stated as 387,000,000 ounces of fine gold. Of this, there may be estimated as 116,000,000 ounces employed in industry. It is impossible to estimate the amount of old material employed in this manner. The figures for 1907 were, according to the same report, 6,500,000 ounces, valued at £27,000,000, new material only being taken into account.

[W. Jacob, *History of the Precious Metals*, 2 vols., London, 1831.—A. Soetbeer, (1) *Verwendung des Goldes und Silbers*, in *Conrad's Jahrbücher für National-ökonomie und Statistik*, Neue Folge, band iii., Jena, 1881; (2) *Edelmetallgewinnung und Verwendung, 1881-90*, ib. dritte Folge, band i., 1891; (3) *Materialien zur Erläuterung und Beurteilung der wirtschaftlichen Edelmetallverhältnisse*, 2nd ed., Berlin, 1886 (translated for the use of the Gold and Silver Commission)—*Annual Reports of the Director of the United States Mint*, Washington.—*Reports and Evidence of the Gold and Silver Commission*, London, 1887-1888; *Parl. Papers*, Nos. C., 5099, 5248, 5512.—Dr. S. M'C. Lindsay, *Preisbewegung der Edelmetalle seit, 1850*, Jena, 1893.] R. H. H.

GOLD AS STANDARD. In history gold appears first as a valuable commodity. Thus in the new world the Peruvians, at the time of the Spanish invasion, valued, used, and treasured the metal, but do not appear to have employed it as a medium of exchange. Rare and highly esteemed, portable, durable, readily divisible, homogeneous, and easily worked, it soon came into use independently among many nations, and at early stages of civilisation, as a medium of exchange, to facilitate the process of barter. Thus the Mexicans used quills of gold dust for this purpose at the time of Cortes. And in the old world, among the Anglo-Saxons of the 9th century, rings of gold, the chief treasure of the kings, seem to have served as a medium of exchange, and by weight as a rough measure of value (Beowulf). These two functions of the metal are not in fact easily separated. The next great stage in the adaptation of the metal as an exact measure of value was the introduction of coinage—an invention which appears to have had a single origin to the east of the Mediterranean, and was adopted by different peoples at different chronological epochs, though at nearly the same stage of economic development. Among the Greeks its progress may be traced almost from its beginnings by extant coins.

Uncoined gold may be a measure of value, but it can hardly be a standard. A measure of value may be said to become a standard when recognised and defined by law, when legal payments are estimated in legal units appointed for that purpose. Thus oxen may be said to be recognised in some Germanic codes as a standard of value, side by side with gold and silver coins. When a piece of gold received the stamp of a king or a city it was thereby effectively declared to be such a unit.

It is unnecessary to enter on the barren discussion whether value can really be measured. Accurately or inaccurately, it is measured in millions of daily transactions, and the attempt to devise an accurate standard measure begins almost with the beginning of history. The definition of value "as power in exchange," though it leaves much to be desired in lucidity and theoretical completeness, may be accepted for the purposes of discussion. The object whose power in exchange is most nearly constant with all persons and at all times will make the best standard measure of value.

Since very early times gold coins have been used as a standard of value, but gold itself can hardly be said to serve as a standard of value until mint regulations have been devised to secure that the value of gold coins shall exactly conform to the value of the gold contained in them. The necessary regulations are these: (1) Gold coins of a certain stamp may only deviate within narrow and fixed limits from a well-known standard of weight and fineness (see REMEDY). To secure this end, means must be taken to withdraw periodically from circulation coins that have become light through wear and tear. (2) All who bring gold bullion to the mint must have the right to receive in return an equivalent in the form of coins. If the coinage of gold is not *free*, the action of the government may tend to a restriction of the coinage, and *pro tanto* raise its value above bullion level. The custom of coining for government profit, usual in ancient and mediæval times, and not altogether unknown in our own, tends to this result. Again, if coinage is not *gratuitous*, there is a margin of possible variation between the value of gold as bullion, and the same *plus* the charge for seigniorage (see SEIGNORAGE). (3) Exportation and melting of coins must be permitted without restriction. Otherwise the supply of coins may from time to time exceed the needs of the community, and the value of the coins will fall below bullion level.

If the government of any country enacts that gold coins issued under the above conditions shall be unlimited legal tender in payment of debts contracted in the terms of the customary measure of value, gold is in that country a standard of value. Given these conditions, gold will be the sole standard of value, if the issue

of other legal tenders is so regulated and limited that their value shall always conform to the value of the gold coins, of which they represent a definite multiple or fraction.

If both gold and silver are freely coined, and are unlimited legal tender in payment of all debts, at a fixed rate, a certain number of silver units being treated as equivalent to one gold unit, we have a joint or bimetallic standard of value. Gold is still a standard, so long as it circulates in the country at all on these terms, but it is a standard jointly with the other metal: the two standards are inseparable so long as the system works. This system, with all the conditions necessary to the maintenance of a joint standard, was in force in France from 1803-1874. A similar system is of high antiquity. It would appear that coins of gold and silver circulated at a fixed rate in Greek cities: the rate being $12\frac{1}{2}$ to 1. Philip of Macedon seems to have made both his gold and his silver coins full legal tender, at this fixed rate, and his gold coins had a wide circulation even outside the Macedonian empire. Under the Roman republic and early empire gold and silver coins circulated at a fixed rate, the unit of value being the silver DENARIUS, or the SESTERTIUS (money of account). Under Constantine the gold SOLIDUS became the chief unit of value; the denarius a subordinate unit. But we do not know enough about the mint regulations of the Greek and Roman states to say with any certainty whether gold or silver was the standard; or, if there was a true joint standard. It seems more probable that neither metal was the standard, but that the coins were a joint standard at a fixed rate, circulating at a price considerably above their bullion value.

Professor Soetbeer's researches appear to make it probable that the ratio of $12\frac{1}{2}$ to 1, as between silver and gold coins, was preserved throughout the Græco-Roman period by the custom of mint artificers and mint authorities; but we know nothing about the market for bullion. (See Mommsen, *Hist. of Rome*, on these points.)

Throughout the middle ages, and indeed till recent times, silver coins were the standard generally in Europe. The position of gold was undefined and anomalous.

Under another system, sometimes known as unrated BIMETALLISM, both gold and silver are freely coined and circulate at no fixed rate. It naturally results that one metal is by consent though not by law adopted as the standard of value, the relative value of the other metal being settled by private agreement for each case. This is not a true bimetallic system, the conditions of legal tender being confused; and may arise from circumstances such as existed in England between 1660 and 1717, when guineas of the nominal value of 20s. were freely coined, and also silver coins 20 shillings

to the pound, the pound (money of account) being the unit of value. This system aimed at rated bimetalism—a guinea = a pound. But the silver coins were so overrated, mainly owing to their worn and clipped condition, that no one would give guineas at the legal rate,—guineas were accepted at a rate varying from 22s. to 30s. The standard of value, as is theoretically possible in a bimetallic community, was in effect a single metal—silver: or perhaps it would be more correct to say the silver coins,—which were also unlimited legal tender.

When the treasury in 1698 fixed 21s. 6d. as the highest rate at which guineas would be accepted by government in payment of taxes, a step was taken in the direction of true bimetalism, which was rendered possible by the recoinage of the silver currency in the latter years of the reign of William III. The last step was taken in 1717 (Newton's Reform), when guineas were made full and unlimited legal tender at 21s. This rate (about $15\frac{1}{2}$ to 1) was above the market rate, and occasioned a great influx of gold to the mint; the silver coinage having returned to its silver value. Nevertheless the bimetallic standard was maintained without serious difficulty until 1775, when a limit was placed for legal tender of silver coins by tale. In 1797 the Bank suspended gold payments, and the country was for some twenty years confined to the use of inconvertible paper. In 1816, with a view to the return to cash payments, gold was established as the sole unlimited legal tender and standard. The free coinage of silver, which had been suspended since 1798, was no longer permitted, and the legal tender of silver was limited to 40s.

The study of monetary science has led in the last two centuries to the adoption of mint regulations and improvements in coinage without which a true metallic standard cannot exist. The influence of Lord LIVERPOOL (father and son, *q.v.*) led to the adoption by this country in 1816 of gold as the sole standard. Since 1872 the chief countries of the civilised world have followed the example of England. It is important therefore to be able to observe and estimate any variations in the value of gold; and for this purpose it is necessary that the laws and circumstances which affect its value should be clearly understood.

The value of gold depends on interaction of demand and supply. Demand for gold is (a) demand for currency; (b) demand for the arts (see GOLD AS CONSUMED IN INDUSTRY); (c) demand for hoarding, which tends theoretically to vary inversely with the value of gold—a smaller hoard of dearer metal being equivalent to a larger hoard of the cheaper (see HOARDING). Alterations in the legal standard of any country will affect this demand in so far as they increase the amount of gold required for daily use in that country, which need not necessarily be the case.

If the value of gold falls or rises, more or less gold will be required to do the same work as currency. (d) Demand for banking reserves. This demand is to a certain extent alternative to the demand for currency (see RESERVES, BANKING).

The existence of an effective bimetallic area of considerable extent tends to keep the value of gold in all civilised countries at a bimetallic level. During the period 1803-1873, if gold appreciated in relation to silver, the demand for silver in France increased, and gold was exported. Similarly during the period of enormous gold production in California and Australia, 1850-1865, France was taking gold and exporting silver, and thus no serious deviation in the proportion between the values of the two metals from the standard of $15\frac{1}{2}$ to 1 was felt. 1853-1860 France coined £155,000,000 sterling in gold, and meanwhile exported great quantities of silver, especially to the east.

Of changes in the demand for gold the most important are those that may arise from alterations in the standard of any country. When Germany in 1872 adopted a gold standard, she at once proceeded to sell silver coins and buy gold for coinage. Between 1872 and 1878 inclusive, about £80,000,000 sterling of gold were coined in Germany. Austria-Hungary prepared for the adoption of a gold standard by the accumulation of a reserve of some £30,000,000 sterling, and Italy secured about £20,000,000 for the same purpose. Between 1873 and 1881 the United States coined nearly £100,000,000; which may be taken approximately as the additional demand due to the adoption of a gold standard by that country in 1873.

It will thus be seen that every country, by altering its mint regulations, has power to alter the metallic standard of value *pro tanto* in every other country using a metallic standard; and from this point of view the contention of those who desire to make currency arrangements a matter of international agreement may be accepted.

The demand for gold and silver as currency has until recent times been alternative. If more silver was used as currency, less gold, and *vice versa*. Recent changes have interfered with this substitution. The international measure of value, gold, has been more and more isolated; silver has been becoming a commodity like other commodities; any increase of supply of gold or any diminution of supply acts with full force upon the standard of value; there is no longer a question of the proportion of any new demand or supply to the total stock of gold and silver, but of its proportion to the total stock of gold alone.

This general change in the currency of the civilised world has been rendered possible partly by the enormous increase in the pro-

duction of gold during the last fifty years, partly by the extension of the banking system, and the greater use of banking facilities, which enable a given amount of metallic currency to effect the exchange of a much greater amount of commodities. Gold, the international standard of value, still circulates in considerable quantities; but it chiefly serves as a reserve to support the fiduciary currency and the book-entry transactions which to a large extent replace it in ordinary use. But this system has its disadvantages. Any sudden demand on the available supply of gold may remove in one country or in many the support on which the fiduciary currency rests. Promises to pay may cease to be current; gold may be eagerly appropriated and jealously held; hence follow temporary fluctuations in the standard of value through increased demand, which disturb for a time all commercial relations.

On the side of supply the value of gold depends, primarily, on the stock in existence. The stock in existence can hardly be estimated at less than £1,500,000,000 sterling; it may well be more. Annual additions have little power to affect the value of so large a stock. But a great increase in production, extended over a long period, as has been the case since 1850, may considerably affect the value.

Some writers on economics have assumed that the value of gold depends solely on cost of production. Others have boldly stated that gold is always produced at a loss. It is probably true that some gold is always produced at a loss. The question with regard to gold is not one of the margin of profitable production, but of unprofitable production. When alluvial gold deposits are being worked this margin is very low. Many claims are worked at a loss under the incentive of gains secured in others. When gold is found in the quartz, at present the chief source of gold production, much capital is wasted in sinking shafts and erecting machinery for unprofitable mines. But no mine will long continue to be worked that does not produce enough to pay current expenses. Circumstances vary, and fluctuations are great. It is, however, certain that gold may continue to be worked below the marginal cost of production.

Such are the conditions that affect the value of gold—the most general and international standard of value. Under these complicated influences it would be surprising if the value of gold remained stable over long periods of time. For short periods this value has great stability owing to the high proportion that the total stock of gold bears to any possible sudden changes in the amount demanded or supplied. An exception may perhaps be made in cases where inflated credit is suddenly shaken. The fall in prices that then occurs, accompanied by

an exceptional demand for gold, is in one aspect the result of a sudden and temporary variation in the standard.

But over long periods great changes have taken place in the value of gold. These changes have been on the whole in the direction of depreciation, but there have been long periods of progressive appreciation. Such changes are very difficult to measure. No certain and unalterable test of value can be applied. The price of wheat, and the money wages of unskilled labour, are useful tests, but leave much to be desired on the score of accuracy. But such questions, however interesting, have only academic importance in so far as they relate to remote periods. The attempt to estimate the fluctuations of gold within a lifetime or a generation is one that must be made, and has often been made. It involves the most important consequences for trade and social relations.

An appreciating standard of value benefits the creditor at the expense of the debtor. A depreciating standard benefits the debtor at the expense of the creditor. It is often argued that if instability is unavoidable, it is better that the debtor should gain than that the creditor should. The masters of industry and commerce are debtors on a large scale. If the money values of their commodities are constantly rising by small increments, trade and industry are affected by a constant stimulus, such as is believed to have affected them between 1850 and 1866, and to have been succeeded, about 1875, by a continuous and progressive depression in all countries that use the gold standard. The burden of government debt is also increased by a rise in the value of gold. The social effects are more obscure though not less certain than those which appear in industry, trade, and taxation. To estimate such changes in the standard the following tests may be applied. The prices of commodities may be studied. If a general rise of prices, lasting over a considerable period, can be substantiated, a fall in the standard may be suspected. If a similar fall in prices appears, then a rise in the standard may be suggested as a possible explanation. But we must see if there be not some general cause or causes affecting commodities that will account for such fluctuations.

The wages earned by labour at different times may also be compared, especially those of unskilled labour. But here the changes affecting efficiency, supply, and demand are more obscure, and their results very difficult to estimate.

Finally, we may observe the causes affecting the supply of, and demand for, the metal or metals established as the standard of value. If two or all of these tests give a similar result, we may consider the change of the standard as sufficiently proved; but it cannot be measured accurately.

To take the recent period 1850-1905: Throughout this period the supply of gold has been largely in excess of all known previous epochs. That increase was largest in the period 1897-1905. Again in the period 1851-1866 no great new demand for gold coinage arose, except in France; which liberated a corresponding amount of silver for use as currency elsewhere. The increased demand for currency must in great measure have been met by the constant extension of banking facilities.

A study of the general prices of commodities by means of index-numbers establishes for the period 1850-1870 a considerable rise. Comparing the depressed year 1850 with the depressed year 1869 by means of Mr. Sauerbeck's figures, we get a rise of prices of about 27 per cent, and other methods (those of Dr. Giffen, Prof. Soetbeer, Mr. Inglis Palgrave, the *Economist*), give very similar results, though the exact proportion is differently estimated. And this in a period when improvements in methods of production, and transport, and exploitation of new countries might have been expected to cause a general fall in prices.

A general rise in money wages between 1850 and 1869 can hardly be denied. Thus the fact of a fall in the standard of value between 1850 and 1870 seems proved; and 20 per cent is the most moderate estimate that can be accepted.

On the other hand, between 1870 and 1893, although the production of gold was still very great, it was less than in the previous twenty years. Great new demands on the stock of gold for currency were made by Germany, the United States, Italy, and Austria-Hungary. The consumption of gold for the arts increased, and has been very roughly estimated by Professor Soetbeer at 11½ millions sterling, nearly one half of the total annual production. The hoards of gold for war treasure by the great continental nations grew. The demand for gold in India (a new demand, specially important in the decade 1860-1870) continued, and absorbed, in the years 1870-1904, over £125,000,000. The bulk of trade over the whole world increased steadily, and a larger proportion of it was conducted on a gold basis.

The general prices of commodities which had previously risen showed during this period a considerable net fall; bringing them lower than they had been in 1850. The general level of wages was probably as low in 1905 as in 1870; though the fact of the fall, and especially its amount, is not so certain as the fall in commodities. This case is more uncertain than the other. The circumstances of demand and supply lead us to expect a rise in the standard; though, considering the great and continuous production of gold, it could not, on this ground alone, be certainly affirmed. The fall in commodities is a certain fact. But some such fall might have been anticipated from the

continued improvement of machinery, methods, and transport, and the development of new agricultural areas. And the wages of labour have not fallen in anything like the same proportion. The estimates of the appreciation of gold since 1873 and the corresponding depreciation of commodities have varied so much that it is hardly practicable to include them here—especially as at the present time (1905) the process appears to continue. Any estimate of this description must be very uncertain.

[This subject is so closely connected with that of bimetallism that a general reference may be made to the list given above under that head. The Report of the Indian Currency Committee, 1893, is the most valuable recent contribution to the literature of the subject. The following works may also be mentioned: Adolph Soetbeer, *Edelmetallproduktion und Werthverhältnisse zwischen Gold und Silber*, 1493-1875, in Petermann's *Geographische Mittheilungen*, Gotha, 1879.—Dana Horton, *The Silver Pound*, London, 1887.—Del Mar, *A History of the Precious Metals*, London, 1880.—*A History of Money in Ancient Countries*, London, 1885.] S. M. L.

GOLD BULLION, AS A COMMODITY AT THE MINTS (see PRECIOUS METALS for bullion as an article of commerce, and GOLD AS CONSUMED IN INDUSTRY for use under that head). So many interesting and peculiar phenomena in the gold bullion trade, and so large a part of the status which it holds in relation to the standard of value, are due to the position in which gold stands at the mints of the world that, without trespassing upon its position in commerce and industry, or without touching upon the metallurgical and mechanical processes through which it passes before it appears clothed with the stamp of authority, a word may be said upon the treatment it receives as a commodity at the hands of the world's coining establishments.

All the mints of the civilised world are open to-day to this commodity in unlimited quantities at a fixed rate or price determined by law. The minor regulations differ in different countries, but the peculiar economic fact—an unlimited demand at a fixed and known rate—holds good for all alike. In England the royal mint, according to the act of 1870, must receive gold bullion when sent in parcels of not less than £100 nominal value. The master of the mint may refuse to receive, assay, or coin it if the standard value of the whole of the bullion is less than its gross weight, requiring a portion of it to be refined in order to bring it to standard fineness; and if the assay reports show that any of the ingots are brittle or contain iridium they will be returned to the depositor. For purposes of convenience it is customary to require intending depositors to give the deputy master of the mint two days' notice, and to furnish in duplicate forms, sup-

plied at the mint, a statement of the mark and assay report on each ingot, and the name of the assayer on whose assay they purchased it. The ingots are then weighed by the proper officer of the mint, and a statement of their weights is added to each copy of the aforesaid forms, one of which is kept by the mint and depositor respectively. If the report of the mint's assayer differs from that furnished by the depositor, and is disputed by the latter, the consulting assayer of the mint makes a new assay, and his decision is final. When these conditions are complied with, and the bullion found to be 916·6, or eleven-twelfths fine, the full mint rate, £3:17:10½ per ounce, is paid without making any charge for coinage, but notice is not sent to the depositor, nor is the money actually paid, until the coinage of the bullion is completed.¹ This causes, therefore, a loss of time and interest on the value of the deposit to the depositor. He consequently prefers to take his bullion to the Bank of England, where he always receives its value immediately upon announcement of the results of the bank's assay, at a rate of £3:17:9, or 1½d. per ounce less than the mint rate. Thus as a matter of fact the English mint has in recent years dealt solely with the Bank of England for its gold bullion. When the Bank has a large stock in hand it requests the mint to take it and resume coinage of gold, and likewise when the mint desires to commence coinage of gold it sends notice to the Bank, which immediately furnishes or procures the bullion. The Coinage Act of 1870 in England has been modified in one particular by the Coinage Act of 1891, whereby light-weight coins, within the limits of reasonable wear and tear prescribed by law, will be received at the mint at their face value, whereas formerly they were dealt with merely as bullion and received according to weight. The injustice whereby the last holder had to bear the whole cost of loss by wear during the entire life of the coin has thus been removed, and the cost of re-coinage is now charged to mint account. An exactly similar relation to that existing between the English mint and the Bank of England exists in Germany between the German mints and the Reichsbank. The present regulations governing the gold coinage of Germany are to be found in the order of the chancellor of June 8, 1875, and the Reichsbank law of

¹ England is the only country in which the price for gold is not quoted for the weight of the fine metal but for the "standard" weight—viz. for a quantity containing 11 parts gold and 1 part alloy, which is the proportion used for English gold coins, whilst in German, French, and American gold coins the proportion is 9 parts gold and 1 part alloy. Any deviations from the standard proportion in England are accounted for by deductions or additions to the weight brought into account, and in the same way in other countries the deviations from absolute fineness are accounted for by deduction, but, as a general rule, bars are not accepted unless they have a certain degree of fineness.

March 14, 1875, whereby 2784 marks are paid for every kilogram of fine gold, and the same is then coined into 2790 marks, thus allowing the mint a profit of 0.215 per cent to meet expenses of coinage. The Reichsbank pays exactly the same rate, and that immediately on ascertaining the weight and fineness, so that the mint is entirely dependent on the bank for the gold bullion it uses. The system in France and Italy, which countries are members of the Latin Union, differs somewhat from that of Germany and England. There gold bullion may be brought to the mints to be coined, and returned in coin of the realm upon completion of the work, usually within a period of ten to thirty days, but less a charge for coinage amounting to 6 francs 70 centimes per kilogram fine. In the United States of America the system is again quite different. Gold bullion is received at any mint or assay office. Of the former there are three, one each at Philadelphia, San Francisco, and New Orleans, and the assay offices are plentifully scattered over the country. The bullion is paid for at once upon ascertaining weight and fineness, generally within two days after deposit, at the rate of \$20.67 per fine ounce. If the bullion is not of desired fineness, and requires parting and refining, a charge is made for the operation, and in addition an alloy charge for the necessary amount of copper to bring it to a standard of 900 fine.

With this review of the conditions upon which gold bullion may be deposited, or sold to the principal mints of the world, it will be readily seen that there is little inducement for the actual miner or producer of gold to take his product direct to the mints, and as a matter of fact, with the exception of small quantities at times brought direct to the assay offices of the United States in the western states, the gold received at the mints usually comes from refining companies through the hands of bankers and brokers. The man who possesses gold in a crude state rarely has it at the desired degree of fineness demanded by the mints. He, therefore, except in the United States, must go to a refining company where he usually sells outright at a somewhat lower figure than the mint rate, instead of employing the company to do the work on his account. The refining company turns out the gold in stamped ingots of standard fineness, and again passes over the commodity into the hands of bankers or brokers at a small discount rather than comply with mint regulations and lose interest on capital invested while awaiting the return. In the United States, however, where the return is immediately made, much more gold proportionally is deposited directly by refining companies than by bankers and brokers. However, it matters not through whose hands gold bullion may pass, or what road it may travel, there remains a remarkable economic phenomenon,

not to be found in the case of any other commodity. There is always an open market or recipient, absolutely bound by law to accept this commodity in unlimited quantities at a known, and fixed, mint value or price; for value and price are here the same, there being no room for the subjective or time elements to enter in except in so far as the national laws of the different countries might be changed. If a man parts with his gold to any one else, or uses it for commercial or industrial purposes rather than take it to the mints, it is because his return is equal to the known mint rate, or because the difference is, in his eyes, equivalent to complying with some of the minor conditions, such as transporting the product to a mint receiving office, or waiting for his money return. Thus also, to whatever use gold may be put, its value can but slightly vary from that stated by law by the principal commercial nations of the world.

S. MCL. L.

GOLD, DISCOVERIES OF. See PRECIOUS METALS, DISCOVERIES OF.

GOLD, DISTRIBUTION AND PRODUCTION OF.

The economic distribution of gold as a medium of exchange is widely different from its geographical distribution as a metal. The United States of America, the United Kingdom, France, Germany, and the western countries of Europe generally, use the largest quantities of gold either for coinage or ornament. The United States are only in part an exception to the statement, as the gold-using states are not the gold-bearing states. Gold is to be found in small quantities in almost every country of the world. In the early ages of the world it probably came mostly from the East,—very likely from the present mines of India: it was next discovered in considerable quantities in South America; then at the beginning of the 19th century in Siberia, 1847 in California, and 1851 in Australia. The re-discovery of the Indian mines, and the opening of those in Queensland, were important factors in the production of recent years, but hardly amount to the addition of a fresh area: British Guiana is in the same category; the recently-opened goldfields of South Africa and Canada have added to the known supply.

In 1907, according to tables compiled from U.S.A. mint reports (see *Statesman's Year Book* 1909), the yield of the different areas in order of fertility was as follows:

	Tons.	£ Mill.
Africa	273.01	30.3
United States	162.75	18.1
Australia	136.19	15.1
Russia	48.02	5.3
Mexico	33.62	3.7
	653.59	72.5
From all other sources	85.23	9.3

The five areas enumerated now provide about five-sixths of the world's annual consumption of gold. South America, once the leading source of supply, is at present quite a minor area; the yield from South Africa increases.

Respecting the amount produced in the past, computations have been made by Dr. Soetbeer which are probably as trustworthy as any such figures can be. He places the production of gold "up to 1600" at 750 tons, and up to 1880 at 10,355 tons, and the stock of gold in the world in 1880 as 9500 tons. But Soetbeer's figures give the total production between 1493 (when America had been discovered) and 1600 as over 745 tons, and there must have been a considerable stock previous to this. The following table exhibits the increase of production of gold.

Annual Average.	Tons.	£ Mill.
1493-1620	5·80	74
1601-1620	8·39	106
1701-1720	12·62	160
1801-1810	17·50	222
1841-1850	58·89	688
1851-1855	194·39	2464
1856-1860	202·80	2571
1861-1865	182·20	2310
1866-1870	188·87	2395
1871-1875	107·98	1329
1876-1880	169·09	2151
1881-1885	152·52	1933
1886-1890	167	2117
1891-1895	293·21	3753
1896-1900	403·05	5126
1901-1905	580·6	6453

The annual averages fluctuate considerably. After 1880, when the Russian supply became important, the production increased nearly 50 per cent. In the ten years after 1840 it increased more than threefold: in the next decade, when California and Australia had been opened up, it had been increased again fourfold. There was a tendency in the supply to fall off steadily from that time for more than thirty years; but lately it has again been increased. The output for 1891, over 183 tons, was about equal to that of 1861, and it has since steadily increased to being, in 1907, over 738 tons. As further discoveries are being made in New South Wales, Western Australia, and British Guiana, the supply is not likely to diminish at present. The average annual production since 1848 has probably not been far short of one-tenth of the total production of gold in the preceding 350 years taken together.

Another interesting feature in the production of gold is the comparative fertility of the different areas of supply. Mulhall, taking 500 years to 1880, assigns 21·5 per cent of the total product to Spanish America, 19·7 to the United States, and 17·8 to Australia. But each year alters those proportions, and in 1907 about 40 per cent came from Africa, 25 per cent from the United States, 20 per cent from Australia, and 8 per cent from Russia. [See table above and art. GOLD in App.]

[The First Report of the Gold and Silver Commission, C. 5099, 1887, quotes Soetbeer's table, and contains the evidence of Sir Inglis Palgrave and Sir R. Giffen. The figures for Australia can be found carefully collected in the *Victorian Year-Book* for 1892, pp. 333 seq.—Suess, *Zukunft des Goldes und Zukunft des Silbers*.] C. A. H.

GOLD AND SILVER WARE. (See HALL MARKING.)

GOLD CERTIFICATES. Twice in recent history the issue of gold certificates has been authorised in the United States. Power was given to the treasury department under the act of 3rd March 1863. They were discontinued by act of 1st December 1878, but again authorised 12th July 1882. These certificates are issued against deposits of gold in denominations of not less than \$20 each, and are designed especially for use as bank reserves, and the settlement of clearing-house balances. The issue of these certificates is suspended whenever the gold in the treasury falls below \$100,000,000.

[*Finance Report of the United States* for 1882, p. 171.—Compare Blue Book, *Committee on Indian Currency* (Gairdner's Evidence).—C. F. Dunbar, *Chapters on the Theory and History of Banking*, 1891.] D. R. D.

GOLD MINING ROYALTIES. (See ROYALTY.)

GOLD NOTES. On account of the popular prejudice in California to paper money of any kind, banks were permitted to be organised in the United States by the act of 12th July 1870, under the national banking law whose issues were to be redeemed in gold coin alone instead of in legal tender which included greenbacks and silver. In all other principal points, however, these institutions were similar to the national banks found throughout the United States. These banks, of which there were never many, were known as gold banks. By the act of 14th February 1880 authority was given to convert these institutions into national banks of the usual form.

[*Finance Report of the United States*, for 1875, p. 219; also for 1877, p. 155.] D. R. D.

GOLD POINTS IN FOREIGN EXCHANGES. The rates of exchange quoted between any two countries are for drafts or bills of exchange, and the price includes, besides the actual equivalent of the standard coin (a), some allowance for interest, according to the tenor of the draft, and (b) a premium which the seller demands for the economy and superior convenience of his draft, as compared with a remittance in bullion. This premium is greater or less, conversely to the amount of drafts in the market as compared with the demand for them, but it cannot, in any case, rise much above the cost of remitting coin, nor can it at all exceed that amount for any considerable time. The cost of remitting gold between London and Paris is somewhere about one-half per cent, or 4 per mille, Berlin about 5 per mille, and New York about 5 per mille. Therefore by

adding or deducting this rate to or from the MINT PAR (*q.v.*), we have a rate which is called the "gold point," or "bullion point," and at which bullion will be remitted one way or the other. The gold points on the London exchange with some of the principal countries are (1906)—

London on	Mint Par.	Gold Exports.	Gold Imports.
Paris . . .	Fcs. 25·22½	25·12½	25·32½
Berlin . . .	Mks. 20·43	20·33	20·52
Amsterdam . .	Fl. 12·10	12·04	12·15
Copenhagen . .	Kr. 18·16	18·07	18·23
New York . . .	\$. 4·827	4·867	4·89

These are the rates at which bullion remittances become generally profitable, but, as a matter of fact, gold movements begin before these points are reached, as some business houses with special facilities, or undertaking large transactions, find a profit in remitting gold at much closer rates.

In comparing these with current quotations, regard should be had to the other factor (*a*) referred to above—the allowance for interest. On the London exchange, rates, as usually given, are for three months' or ninety days' drafts, the only exchanges quoted "short" being those with Paris, Amsterdam, New York, and Calcutta.

Care must also be taken to distinguish between rates quoted in foreign money and those quoted in sterling. With France, Belgium, Italy, Germany, Austria, Holland, and the Scandinavian Union, exchanges are quoted in foreign money, at so many francs, marks, florins, etc., to the pound sterling; and, in these cases, the *higher* the quotation the more favourable it is to this country—*i.e.* the greater the amount of foreign money we have to receive. The *lower* gold point is that at which bullion will leave this country. With Spain, Portugal, Russia, India, and China, exchanges are quoted in sterling, at so many pence per dollar, milreis, rouble, or rupee, and the *lower* the quotation the more favourable it is to this country, whilst the *upper* gold point will mark bullion exports.

At some times and places, where a gold standard nominally exists, and the currency consists of inconvertible paper and of subsidiary coinage that is useless for export, the movements of the exchanges are independent of the "gold points," or, it should rather be said that new and fluctuating gold points are set up, governed by the cost of obtaining gold as well as of remitting it. R. W. B.

GOLD, QUEEN. See QUEEN GOLD.

GOLDSMITHS; GOLDSMITHS' NOTES. The date (namely about 1645) at which English goldsmiths extended their operations, from trad-

ing in money and the precious metals to a regular system of private banking, can be approximately fixed through a pamphlet entitled *The Mystery of the Newfashioned Goldsmiths or Bankers discovered* (London, 1676). This pamphlet informs us that the goldsmiths had extended their previous business to lending money and to most of the operations of modern banking, their largest advances being made to the king upon the security of the taxes. The goldsmiths allowed interest to those who placed money with them, and the receipts which they gave for these deposits passed from hand to hand as currency in much the same manner as Bank of England notes do now. That this business soon grew considerably is evident from the testimony of Sir Dudley NORTH in 1680, who, on returning from abroad after many years, was greatly astonished at the new practice of merchants and others making payments by drawing bills on bankers, *i.e.* goldsmiths. Hence it will be seen that the goldsmiths, from the middle of the 17th century onwards, assisted greatly 'to accustom people to the use of a paper currency. As instances of this it may be cited that the Long Parliament in 1649 agreed to accept Goldsmiths' Hall bills, as well as ready money, in payment for the bishops' lands (Scobell's *Acts*, ii. 86); and that in 1696 during the recoinage "all great dealings were transacted by tallies, bank bills, and goldsmiths' notes" (Davenant, *Discourses*, ii. 161). The English goldsmiths of the 17th century in issuing their notes acted on quite a different principle from the continental banks of that date. Most of the continental banks, for example the BANK OF AMSTERDAM (*q.v.*), professed to be merely banks of deposit of coin or bullion, and to hold in this form the full value of the bills issued against these deposits. Our goldsmiths, and the Bank of England following them, purported to give in their bills the equivalent of what they had received, but never pretended to take the deposit for any other purpose than that of trading with it. They did not make their issues square exactly with the deposits of coin and bullion entrusted to them, "but coined their own credit into money." This resulted occasionally in difficulties. The first recorded run on the private banks, or goldsmiths, was in 1667 after the disastrous defeat suffered by the English fleet at the hands of the Dutch at Chatham. Then the stoppage of the exchequer in 1672 seriously affected their credit; even their honesty was impugned; and in course of time it was found that paper money issued on the security of a small number of individuals, could not circulate profitably in competition with that of a powerful joint-stock corporation, such as the Bank of England became in spite of the goldsmiths' opposition.

[The most interesting information as to the general banking business of goldsmiths is given in

the pamphlet of 1676 already mentioned (London, 4to, 8 pp.), which is quoted with additional remarks by Anderson, *Chron. Deduct. of Commerce*, year 1645. Also another pamphlet, *England's Glory in the Great Improvement by Banking and Trade*. London, 1694.—W. Cunningham, *Growth of English Industry and Commerce*, ii. 105, 222, 224.—Thorold Rogers, *First Nine Years of the Bank of England*, pp. 6, 21, 70.—Macaulay, *Hist. of England*, ch. xx.—Davenant, *Discourses on the Public Revenues and Trade of England* (1698), i. 265, and ii. 161.—*Mystery of the New-Fashioned Goldsmiths or Bankers Discovered*, 1676, reprinted in *Quart. Journ. of Economics*, Boston, Jan., 1888.] E. de B. G.

GOOD. This word forms a term sometimes used in the British colonies for a paper acknowledgment of a debt—something of the nature of an I.O.U. We have met several instances of such acknowledgments being deposited in cases of unauthorised borrowing from funds under the control of the borrower.

But the most distinctive use of the word was to denote government notes in British Guiana: it takes the form "good-for" in the currency history of the Cape Colony. In the case of Berbice in 1800 and 1809 the Court of Policy issued these notes of various amounts in guilders. Similarly in 1806 in Demerara "goods" secured on the colonial revenue were made a legal tender, and those of private persons competed with them in circulation. In the Cape the term "good-for" was confined apparently to the private note which competed with government paper up to the year 1822. Compare French *Bon, Bon pour*, etc.

[Chalmers's *History of Currency in the Colonies*, s.v.] C. A. H.

GOOD DELIVERY. An expression used on the stock exchange. A stock exchange security is not a "good delivery" if it has any defects on its face, e.g. mutilation, absence of the proper coupons or of any necessary revenue stamps, irregularity in the number; the name of the owner written on the document when payable only to bearer, etc., and in such a case a purchaser is entitled to refuse acceptance. In cases of dispute the decision of the committee of the stock exchange is conclusive. E. S.

GOOD-FOR. See **GOOD.**

GOOD FOR TRADE. "It is good for trade" is a very common popular answer to any condemnation of wasteful consumption or extravagant expenditure. That consumption, whether extravagant or not, of the produce of any particular trade is profitable to the persons actually engaged in that trade is obvious; no one doubts for instance that to break a window is good for the trade of the glaziers. It is hastily inferred from this that extravagant consumption is "good for trade" in general, or profitable to the whole body of producers. But so long as the amount of labour performed and its productiveness remain unchanged, an

increased consumption of one sort of produce must be accompanied either by a decreased consumption of another sort of produce or by a decrease of savings. Consequently the expenditure which is "good" for one trade is equally bad for other trades. Whether the extra consumption of one kind of produce is made up for by a less consumption of other kinds or by a decrease of savings makes no difference. Diminished saving is just as "bad" for some trades as diminished consumption is for others; saving is "good" for the trade of all those who produce the kind of commodities which are saved and added to the capital of the country, e.g. machinery, factories, railways, ships, and houses. That unusual expenditure in one direction only benefits one set of trades at the expense of others was clearly recognised by many traders after the jubilee rejoicings in 1887, when they found that the extra consumption of the products of other trades was being compensated for by a diminished consumption of the products of their own.

[Comp. Bastiat, *Sophismes Économiques, ce qu'on voit et ce qu'on ne voit pas*; 1. La Vitre cassée.]

E. C.

GOODS AND CHATTELS. An ambiguous expression like the word **EFFECTS** (*q.v.*) which, if used in a will, is generally construed as including the testator's whole personal estate unless the context requires a more restricted meaning. E. S.

GOODS OF THE FIRST ORDER; GOODS OF THE SECOND ORDER. See **PRODUCTION, INSTRUMENTS OF.**

GOODS, CLASSIFICATION OF.

- (1) Material Goods and Personal Goods, p. 229; (2) Durable Goods (Accumulable or Potential) and Transient Goods (Unaccumulable or Actual), p. 229; (3) Consumption Goods and Production Goods, p. 229; (4) Gratuitous Goods (or Natural) and Onerous Goods (or Acquired), p. 229; (5) Appropriate Goods and Unappropriate Goods, p. 229; (6) Transferable Goods and Non-Transferable Goods, p. 230.

The term goods has been used in a very general sense to denote any object of human desire. One of the purposes of a classification of goods is to provide the data for determining a definition of wealth adapted to economic science. But as hardly any of the objects of human pursuit are without some bearing on the science, there is a more important use in classifying them; namely, to bring out the different relations in which these various objects stand to economic activities. For this purpose it is necessary to consider such distinctions as are important in each of the different branches of the science. Accordingly, goods may be classified (1) from a general point of view; (2) from the point of view of production and consumption; (3) from the point of view of distribution and exchange. Under (1) goods may be divided into material and personal, and into durable and transient; under (2) into consumption

goods and production goods, and into gratuitous goods and onerous goods; under (3) into appropriable and un-appropriable, and into transferable and non-transferable.

1. *Material goods and personal goods.*

Material goods are those that depend on the properties and positions of material objects, not including human beings (*e.g.* food, climate, shelter provided by houses, transport of commodities). Personal goods consist of (i) attributes of individual persons (*e.g.* strength, knowledge, skill, a good conscience); (ii) relations between persons (*e.g.* social organisations, the esteem or trust felt by one person for another); and (iii) those benefits conferred by persons on themselves or others which do not involve any palpable change in the properties or positions of material bodies (*e.g.* advice, entertainment, protection, instruction). The act of rendering a utility to a person is called a *service*: a service is material so far as it effects an alteration in material things (*e.g.* cooking of food, cleaning and repairing household goods); while a service is personal which creates a personal utility (*e.g.* advice, instruction). The services of domestic servants are partly personal and partly material.

2. *Durable (accumulable or potential) goods and transient (unaccumulable or actual) goods.*

Durable goods are those which, being comparatively permanent, are capable of affording utility or a series of utilities at some future time; while transient goods are the actually realised utilities themselves. Among durable material goods are to be included houses and machines; and among durable personal goods, abilities and knowledge. Transient material goods would include warmth from fires; and transient personal goods would include professional advice and hearing of lectures. Durable goods may generally be regarded as the *potential* sources of *actual* or transient goods. But it is obvious that most of the things that are distinguished as transient goods (*e.g.* instruction) may produce more or less *durable* results; and, on the other hand, that durable goods (*e.g.* coal and food which are destroyed in use) may produce more or less *transient* results.

3. *Consumption goods and production goods.*

Man can create or destroy only utilities, not matter. The ultimate object of all economic activity is what may be called the *enjoyment* of utilities. On the other hand, some *sacrifice* of utility in the form of labour or effort is in general a necessary condition for creating utilities. Hence economic science has to take note of two antitheses: viz. (1) between the *destruction* and the *creation* of utilities; (2) between the *enjoyment* and the *sacrifice* of utility. The terms consumption and production would naturally be used to indicate the former antithesis; but, as a matter of fact, they have come to be used with more special reference to the latter. In other words, consumption implies *enjoyment*, whether this is or is not attended by the destruction of utility; and production implies the *sacrifice* of utility, provided this is undergone with the purpose of creating utility. Hence we have the following

important division of goods into consumption goods and production goods. Consumption goods (*i.e.* enjoyment goods) are those which, being in the hands of the person destined to enjoy them, can be directly utilised for enjoyment without further expenditure of labour. Production goods, or auxiliary goods, are the unfinished products or instruments intended to be employed in aid of labour which can only be utilised by further expenditure of labour. According to these definitions, commodities in the hands of dealers, though otherwise completely adapted for direct enjoyment, are to be classed as production goods, because they are not in the hands of those destined to enjoy them; and, moreover, are only to be utilised by the labour of shop-attendants, errand boys, etc. On the other hand, a house of residence, even though occupied by some one other than the proprietor, is to be called a consumption good. Of course any durable consumption good is productive in the sense of affording, from time to time, many utilities; and, on this account, such durable consumption goods have been called "consumers' capital." But since the utilities afforded by a place of residence, for example, are direct and not indirect, it is called a consumption good, though in order to preserve its capacity for yielding utilities, it may require repairs and cleaning from time to time. Consumption goods are also called *goods of the first order*; while *goods of the second order* are those used for the direct production of goods of the first order, and so on. These distinctions are, however, not easily applicable (see PRODUCTION, INSTRUMENTS OF).

4. *Gratuitous (or natural) goods and onerous (or acquired) goods.*

Goods have also been distinguished according as their capacity to yield utilities is or is not due to human effort. The latter, being gifts of nature, have been called gratuitous; and the former, being acquired by labour, have been called onerous. Thus Ricardo speaks of "the original and indestructible powers of the soil." But it is obviously not easy to draw the line between what is in this sense original and what is due to labour and industrial organisation. For many purposes it would be more convenient to distinguish as gratuitous those goods which have been handed down to the present industrial generation without effort on their part, *e.g.* permanent properties of the soil and inherited personal aptitudes. But in any case the distinction would be difficult to apply with any exactness.

5. *Appropriable goods and unappropriable goods.*

In using the term appropriable, it should be explained that what is appropriated in any case is the *opportunity* of benefiting from goods; and this opportunity may or may not be secured by legal authority. Appropriation implies some *limitation* of opportunity; *i.e.* while a single individual or a set of individuals can enjoy the opportunity, others are excluded from it. Possession by an entire political community would, however, not generally be called appropriation. In this sense, such material goods as climate and air, and such personal goods as political and industrial

organisations, may be classed as unappropriable. Some appropriable goods (*e.g.* public roads and buildings, rivers and seas, commons, etc.) are actually unappropriated. Hence among appropriable goods we must make a further subdivision into appropriated and unappropriated.

6. Transferable goods and non-transferable goods.

Appropriable goods have further to be subdivided into *transferable* and *non-transferable*. The means and limits of transferability depend on legal as well as physical conditions. If one person A is in a position to choose whether he shall confer a benefit on B or on C, such a service may be called *transferable*, whether the transference is effected by contract between A and B or between B and C. Non-transferable appropriated goods are either material (*e.g.* opportunities of using public property or natural gifts) or personal (*e.g.* personal attributes, relations of esteem or trust, titles, honours, and other privileges). Transferable appropriated goods are also either material (*e.g.* opportunities of using goods in perpetuity or temporarily) or personal (*e.g.* benefits directly conferred by one man on another).

[Marshall's *Principles of Economics*, 2nd ed. bk. ii. ch. ii. iii. iv.—Sidgwick's *Principles of Political Economy*, bk. i. ch. iii. iv. v. These two works are specially instructive in regard to economic distinctions of goods. In addition should be mentioned the economic works of J. S. Mill, Senior, Hermann, Bastiat, Wagner, and Nicholson.]

w. E. J.

GOODS, ECONOMIC. In English the singular noun *Good* is usually abstract and psychical; it is usefulness, benefit, or blessing. But by the plural (*Goods*) is denoted concrete embodiments of usefulness, in short, "commodities" (see **COMMODITY**), the singular of which word is employed by economists to represent the missing singular of "goods."

As political economy is usually defined by its relation to wealth, and as wealth is defined as a sum of goods, it is clear that the precise definition and the classification of goods are matters of great theoretical importance. The discussions, growing no doubt out of the remarks of Adam Smith on the physiocrats, between Malthus, Ricardo, James Mill, Bailey, Say, and others on the proper line of distinction between productive and unproductive labour, took in later times the form of a debate on the propriety of including "immaterial goods," services, and legal rights among economic goods. The simplest and most intelligible definition of a commodity, a material means, not unlimited in supply, of satisfying human wants, excludes too much; and there is general assent only to the element of limitation, as it seems obvious that goods of which no "economy" is needed are not economic goods.

To consider this question would be in reality to write a treatise on the whole theory of the fundamental notions of political economy, and it will be enough to refer to the authorities below.

[Marshall, *Principles of Economics*, bk. ii. ch. ii. 1890.—Hermann, F. B. W., *Staatswirtschaftliche Untersuchungen*, 1832, ch. iii.; *Die Güter*.—Schäffle, A., *Mensch und Gut*, 1861.—Wagner, A., *Allgem. Volkswirtschaftslehre, Grundlegung*, 2nd ed., 1879, pp. 12-30.—Menger, Carl, *Volkswirtschaftslehre*, 1871, ch. i. and ii.—Böhm-Bawerk, E., *Rechte und Verhältnisse vom Standpunkte der Volkswirtschaftlichen Güterlehre*, 1881.—Wieser, F., Article "Gut" in the *Handwörterbuch der Staatswissenschaften*.—Say, J. B., *Cours complet d'écon. pol.*, 2nd ed., 1840, pt. i. p. 31, ch. i.; *De nos besoins et de nos biens*.]

J. B.

GOODWILL,—the expectancy of a continuance, to the advantage of a successor in an established business, of the personal confidence, or of the habit of recurring to the place or premises or to the known business house or firm, on the part of a circle or connection of clients or customers. This expectancy is found to have a marketable value, and may arise from, or be raised in value by, several circumstances, such as the acquisition by the assignee of the sole ownership of the premises in which the old business had been carried on, the assignment to him of existing stipulations in behalf of the vendor, or agreement on the part of the vendor to recommend his successor or to abstain from competition with him. But goodwill in the legal sense, "goodwill without more," or goodwill in the sense of the bankruptcy acts, is restricted to such rights as may pass at law by an assignment of the goodwill without any special stipulation. Under this head will fall the exclusive rights to carry on the old business and to represent that it is the old business which is being carried on, which carry with them the exclusive right to the trade name—if the use of it be not likely to mislead, or be not so used as to mislead the public into a belief that it is the same person who carries on the business or that any of the old members are still in the business—to the trade marks, and any restrictions on others in favour of the business, so long as these are not merely personal, in favour of the original trader. Transfer of the goodwill in the absence of express stipulations leaves the original trader in the same position as any member of the public, free, so long as he does not profess to carry on the old business, to set up a business similar to the one sold, in his own name, where he likes and as he likes, to compete and to solicit old customers publicly or privately, and to represent that he had been a member of the old firm. Goodwill may be voluntarily assigned *inter vivos* as well as bequeathed by will; it is also liable to involuntary alienation upon bankruptcy or insolvency. Where compensation is paid for compulsory purchase of business premises under railway acts and the like, the compensation includes not only the value of the premises, but also as a general rule a sum representing the Goodwill.

[Charles E. Allan, *The Law relating to Good-will*, London, Stevens and Sons, 1889. Compare Schäffle, *Ausschliessende Rechte*; Böhm Bawerk, *Rechte und Verhältnisse*.] A. D.

GOOGE, BARNABY (1540-1594), published *Four Books of Husbandry*, collected by M. Conradus Heresbachius, Councellour to the high and mightie Prince, the Duke of Cleve, etc., newly Englished and encreased by Barnaby Googe, Esq., London, 1577, 4to. This work was in the main a translation of Heresbachius's *Rei Rustice libri quatuor*, etc., Colon, 1570, 8vo; Spire, 1595, 8vo; Heidelb., 1603, 8vo. Editions of Googe's work were published in 1578, 1586, 1596, 1601, and 1614, and it became the basis of *The Whole Art of Husbandry in foure bookes*, etc., by Captain Gervase Markham, London, 1631, 4to.

[See notice of Googe, *Dictionary of National Biography*, vol. xxii.] W. A. S. H.

GOSSEN, HERMANN HEINRICH (1810-1858), was born at Düren, then a French village. His father and grandfather were government officials, and he followed the same career, with a want of success which is attributed to his predilection for abstract studies. He is described as amiable and unpractical. He retired into private life 1847; occupying himself first with a project of universal insurance, afterwards with his book entitled *Entwicklung der Gesetze des menschlichen Verkehrs und der darausfließenden Regeln für menschliches Handeln*, which was published at Brunswick in 1854.

This work, which had been generally overlooked even in Germany, and is not mentioned in Roscher's History, was brought to light by Professor Adamson, and an account of it was given by Jevons in the preface to the 2nd edition of his *Theory of Political Economy*. It was extremely rare; there probably did not exist a copy in England except one in the library of the British Museum. It was reprinted at Berlin, Prager, in 1889. The work is an attempt to found economics on a mathematical basis, and the author regarded his services in the reform of the method of the science as similar to those of Copernicus in astronomy. We are told by Jevons that Gossen, who had been entirely unknown to him, had "completely anticipated him as regards the general principles and method of the theory of economics," but had been unfortunate in his development of that theory. J. K. I.

Gossen's book contains two elements of unequal value: a somewhat narrow and pedantic application of utilitarian philosophy to politics and ethics, and a very original formulation of the principle of final utility in economics. He starts from the epicurean or utilitarian first principle, "Man wishes to enjoy his life and makes it the aim of his life to raise the enjoyment of his life to the highest possible degree." Gossen maintains in the spirit of Bentham that

the object of all men is to obtain the greatest sum of pleasure; in the spirit of Butler that, because this purpose is universal, it must be the design of the Creator. The true revelation given by the Creator is the command, "Man discover the laws of my creation and act according to those laws."

In obedience to this precept we have to investigate the laws of pleasure. They are two. (1) The magnitude of a pleasure continually diminishes up to the point of satiety, the longer we apply a stimulus or pleasure-giving object of constant quantity without cessation (*wenn wir mit Bereitung des Genusses ununterbrochen fortfahren*). (2) There occurs a similar diminution of the pleasure when we repeat the conditions of a pleasure enjoyed before. The initial magnitude of pleasure is less, and the period of enjoyment up to the moment of satiety is shorter.

These laws of our sentient nature are illustrated by diagrams closely resembling those which Jevons independently constructed, ex-

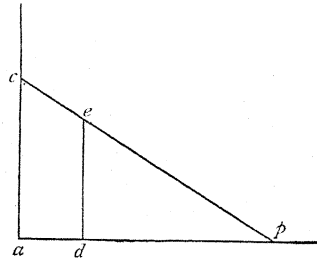


Fig. 1.

cept that Gossen prefers to use the simplest form of "curve," viz. the right line. Thus, in the accompanying figure, time is represented by the abscissa (e.g. *ad*), and the corresponding magnitude of pleasure by the corresponding ordinate (*de*).

The geometrical representation of psychical quantities is defended by the analogy of astronomy, in which science we compute distances of which the direct measurement is impossible. This exaggerated estimate of the mathematical method should be compared with the remarks in the Preface; where Gossen compares his work to that of Copernicus.

Gossen goes on to consider the most advantageous method of employing a given time upon different kinds of enjoyment. He finds that it will be best to leave off each pleasure at a point such that the terminal magnitude of pleasure is the same for each species of enjoyment. This simple principle is worked out by Gossen in considerable detail. Assuming for the sake of illustration the relation between utility and time to be of the simplest, the *linear*, species, he assigns actual numbers, and constructs an imaginary table for the best

employment of a given time (pp. 17-20). He may seem somewhat deficient in the quality of mathematical elegance.

To carry out the purpose of our life we require a knowledge, not only of the laws of pleasure which have been enunciated, but also of the outer world in its relation to our happiness (p. 23). From this point of view there is presented a threefold division of goods (pp. 25-27). The first class denotes articles ready for consumption, *e.g.* an apple, or a coat. The second class denotes materials which require to be worked up before they take a place in the first class, *e.g.* wheat and cloth; also such articles as a pipe, useless without tobacco, a stove, without coal. A third class denotes objects which are altogether of the nature of means; such as fuel used for machines, everything used for production which does not subsist and enure in the finished product.

The law of diminishing utility which was first enounced with respect to time becomes applicable to commodities, primarily those of the first class, and indirectly also those of the second and third classes—if we take quantity of commodity as the independent variable or abscissa, as in the diagram above; the dependent variable or ordinate being, as before, magnitude of pleasure.

We have next to take into account the labour required to produce goods. Gossen's theory of labour is equivalent to that of Jevons, but worked out in greater detail. If, in the

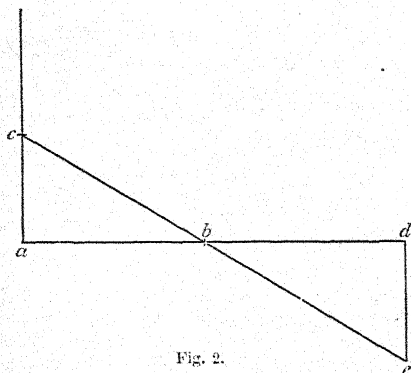


Fig. 2.

accompanying figure (Fig. 2), the abscissa *ad* represents the time during which force is uniformly put forth, the ordinates represent the corresponding utility, beginning with positive pleasure and descending to the pain of fatigue. The same figure serves to illustrate the relation between the quantity produced and the pleasures or pains of production; provided that a constant number of days, or hours, of work goes to a unit of product. But this identity is destroyed, and an additional figure is required when there is a change in what

Gossen calls "skill" (*Geschicklichkeit*) or productivity of labour (pp. 40, 42, etc.). The relation between this "skill" and another coefficient described as "capacity for work" (*Arbeitskraft*) forms a nice question of interpretation (cp. pp. 40-42, 48, 53, 58, 64, 73, 108).

The separate representations of the feelings attending production and consumption are ingeniously combined by Gossen. He superposes on the pleasure of consumption the pleasure or pain of work by reversing the figure proper to the latter (our Fig. 2); laying down the positive ordinates underneath, not above, the abscissa. The ordinates of the curve *ce* in our Fig. 3 (Gossen, p. 39) represent as before pleasure in the way of consumption. The

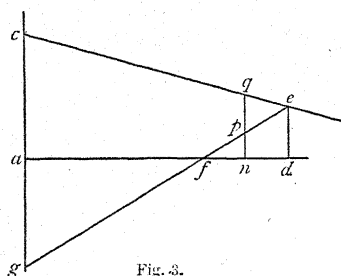


Fig. 3.

ordinates of the curve *ge* measured downwards now represent the pleasure of labour. Thus *ag* is the positive pleasure of production at an initial stage. At the point *f* there is neither pain nor pleasure. To the objective quantity *an* corresponds the negative pleasure, the pain of labour *np*. Hence the total satisfaction derived from *an* is represented by the figure *geqp*. This area is a maximum when the abscissa is *ad*.

This illustration relates primarily to a single product. But it may be extended to illustrate the most advantageous distribution of labour over a variety of employments, the ordinate representing no longer the utility derived from a single source, but from a whole set of objects, in the proportions prescribed by the theory of final utility.

This theory of economic equilibrium, as we might call it, is worked out in immense detail (pp. 40-80). Conclusions tolerably obvious to common sense are enounced with respect to a great number of supposed cases; the enhancement of an existing pleasure (higher pleasure corresponding to the same amount of means), the addition of a new pleasure, either requiring no exertion or derived from labour, a change in "skill," or in "capacity for work," and so forth. Gossen illustrates the conclusions by numerical examples with his usual exhaustiveness.

So far we have investigated the laws according to which the solitary economic man would

regulate his work and pleasures. But in a regime of division of labour there arises the need of exchange. Gossen employs curves of the sort represented in our Fig. 1 in the exposition of a theory of exchange which bears comparison with the constructions of the mathematical economists who have succeeded him. He prettily illustrates the advantages of exchange by the case of two children, one of whom has more bread and butter, the other more milk than he wants (p. 80). Observing that the sum total of utility will vary according to the terms of the exchange, he is led to investigate the arrangement which is productive of "greatest happiness," of which the condition is that the final utility due to the last increment of a commodity should be the same for all persons; a proportion which is extended so as to apply to the distribution of labour as well as commodities. This utilitarian distribution, according to which "each obtains the amount which he can justly claim," tends to be realised in virtue of the correspondence between private and public interest. This sort of "harmony" has not been described more extravagantly by Bastiat (90-100). The realisation of the true paradise is the removal of hindrances to the free play of self-interest.

Before showing how these hindrances are to be removed, Gossen prefixes several miscellaneous theories, some of which may be noticed in the order in which they occur—not a very lucid order.

The theory of rent is investigated by Gossen in some not very inviting symbols. The effects produced on rent by the addition of a pleasure requiring no exertion, by the increase of "skill," and other changes above adverted to, are formulated with characteristic elaborateness (pp. 103-114).

A consideration of the future value of rent leads to a theory of capitalisation, which has some affinities to those which have been propounded by Jevons and by Professor Marshall (pp. 114-118).

Gossen next inquires what are the independent variables, the determining factors of, as we should say, economic equilibrium. His fourfold division of the ultimate elements deserves attention (pp. 120-121).

The next subject which comes up is the measurement of pleasure. Gossen is as sanguine as Jevons about the possibility of constructing demand-curves. He thinks that the mean results thus obtained might serve as a guide to the individual in his efforts to maximise his own pleasure (p. 127).

Among the miscellaneous remarks which follow may be noticed a distinction between necessities and luxuries: with a fall in price the total expenditure on a necessary decreases, —on a luxury, increases (p. 133 *et seq.*).

Gossen occupies some pages with "verifica-

tions," among which he places the proposition that rent does not depend on cost of production. There follows an extensive series of common-places (p. 148 *et seq.*) under the head "errors of statesmen and economists."

The "errors" of the moralists are more piquant. Gossen complains that they have disparaged the principle of self-interest. Failing to perceive that "the creation is perfect," they have neglected the motive-power provided by the Creator for his machine. The true religion of the Creator aims at maximising the sum of happiness on the earth. The priests of the true religion are scientific discoverers; its sacraments physical and chemical experiments.

The pedagogues are next arraigned for stereotyping the system of classical education (p. 190).

It remains only to show how to remove the impediments which prevent the law of pleasure being carried out, and earth being turned into a paradise. The "impediments in man himself" are to be removed by a perfect education, of which Gossen prescribes the model. Among artificial or external hindrances is a bad currency, a subject on which Gossen has much to say. He recommends that the state should guarantee the fineness only, not the weight, of the coinage. He disapproves of a legalised rate between gold and silver, speaking with reference to a single state.

Freedom from hindrance does not imply abolition of property (p. 228). But the action of the state must be kept at a minimum. The true church, which is the school, would require no protection.

A system of state-credit or national loan-fund (pp. 239-250), and the nationalisation of land (p. 250), are also recommended.

In conclusion (p. 273) Gossen dwells on the benefits to be expected from the adoption of his recommendations: "*Nothing more is wanted to make earth a paradise*" (italicised in the original).

These speculations appear to be, as Jevons says, of inferior merit. Gossen is guilty of a fallacy to which mathematical economists are peculiarly liable: what may be called the "illicit process" from the principle of utility in economics to utilitarianism in the philosophy of conduct. The logical error is aggravated in the case of Gossen by a certain pedantry and want of humour. His strength lay only in the more mechanical portions of the mathematical theory. He was a man of one idea; but that was an immortal one.

[Preface to the second edition of Jevons's *Theory of Political Economy*, 1879.—*Journal des Economistes*, 4th series, vol. xxx., 1885, p. 68.—*Un Economiste Inconnu*, by Prof. Léon Walras; containing a biographical notice supplied by Gossen's nephew.] F. Y. E.

GOTHENBURG SYSTEM, THE. Spirits are now sold in Sweden, largely also in Norway and Finland, under the "Gothenburg System." From the beginning of the century, the right of distilling brandy had been so identified with land cultivation that a sort of monopoly of a very deadly kind came into existence. Until 1824 there was "unchecked distillation for use of the household." This turned every peasant's home into a centre for the widest and easiest distribution of a very powerful liquor. The results of this "freedom of a necessary industry" were such as to create alarm in every class. In 1830 the long struggle began which resulted in the famous law of January 1855, by which this free household distillation was practically checked. The minimum quantity to be distilled daily at an authorised still must be 300 kans. (The kan = 5756 gall.) Legal, medical, clerical officials were prohibited from having any advantageous connection with the manufacture, and to the community was given the right to forbid non-licensed traffic in retail form. No liquor legislation ever had greater or more instant effect. In 1853 between 33,000 and 34,000 distilleries were producing above 35 millions of "kans." In 1855 the stills had been reduced to 3481, with a production of less than 10 millions of kans. Further enactments made debts incurred for brandy not recoverable by law, forbade "drinking on credit," etc. Almost every separate provision of the "Gothenburg System" is here *except one*. Each year's reports from country and town made it clearer that the essential parts of this new legislation could be defeated so long as the sale was controlled by private individuals whose profits depended upon the widest possible distribution of brandy. The Gothenburg System meets this difficulty by giving the entire control into the hands of a company that makes no profit from the sales. In October 1865 the first company began its work. The fact that all gains from liquor sales were taken from the private individual and given to the community enabled the authorities to carry out the previous provisions of the law. Sales on credit or for pawn were stopped. Sales on Sundays and holidays were forbidden, also to youths. Food, and a variety of wholesome drinks upon which the seller *can* make profit, must be on hand. The express motive of this legislation to use the profits for the public good is shown in the erection of reading-rooms and coffee-houses in which latter not even beer is sold. The company is steadily extending these benefits beyond the letter of the law. Legally, spirits may be sold to youths of fifteen. The company has extended the age to eighteen. The hours of closing have been reduced from 10 P.M. to 7 in winter, 8 in summer. It does not use all its licenses, nor allow places of sale to be opened in the new quarters of the town. It

has reduced the strength of the alcohol from 46 to 40 per cent.

A weakness of the system is the temptation of the commune to use the revenues simply for fiscal purposes. Friends and opponents therefore now demand that the profits of the brandy sales should go direct to the government to be used for the objects which are most closely connected with the evils of intemperance. Norway, especially, has recognised this danger, and is showing interesting results. It is, however, conceded that though "brandy is checked, beer and wine go on apace." The spread of beer drinking, especially in the country, is now so serious as to have brought about an agitation for the company control of beer and wine. A leading Norwegian authority, Director Berner, believes that this final step is only a question of time. Though the "Gothenburg System" has been praised far beyond its deserts, the evidence is irresistible that a very distinct social advantage has been won under its influence.

[Reports that have been published since 1885 by Dr. S. Wieselgrin of Stockholm, now general director of prisons, are of great value, as he is one of the few writers upon this much debated subject who speak without passionate prejudices. An entire summary of his opinions may be found in the *Bericht des III. Congresses gegen den Missbrauch geistiger Getränke*, Christiania, Sept. 1890. This report also contains an admirable paper by H. G. Berner, showing the development of this system in Norway. Both articles are followed by a discussion by those who represent friendly and hostile attitudes toward the system. Important matter may also be found (pp. 55, 61, 66, 116, 121, 156, 383) in the bound vol. of the *Internationale Monatschrift zur Bekämpfung der Trunksitten*, 1891. *Erster Jahrgang*, Bremerhafen, C. G. Tienken.—See *Local Option in Norway*, T. M. Wilson, C.E., Bergen, 1890.—Also Dr. Baer, *Der Alkoholismus*, pp. 442 *et seq.*—Dr. Martins, *Handbuch der Trinker und Trunksuchtsfrage*, pp. 387, Gotha.—Dr. Siegfried Wieselgrin's papers are published in German under the title, *Die Entwicklung der Schwedischen Branntwein-Gesetzgebung von 1835-1885*, Emil Strauss, Bonn.—Special Report by J. G. Brooks to Massachusetts Govt. 1894.—*Report of Massachusetts Commission* (House Document No. 192, 1894). Obtainable from members of the legislature.—Dr. Gould's *Report on the Gothenburg System*, Department of Labour. Obtainable from the Hon. Carroll D. Wright, Washington D.C.—Articles in *Forum*, December 1892, Mr. Brooks, and March 1894, Dr. Gould.—Article in *Atlantic Monthly*, December 1893, Dr. Gould.—Article in *Arena*, April 1894, Mr. John Koren.—Bishop of Chester, in *North American Review*, May 1894. Article in *Economic Journal* (British Association), June 1894, Mr. Brooks. For a different view of this question, see articles in Jan. and Feb. numbers (1892) of *Internationale Monatschrift*.] J. G. B.

GOUGE, WILLIAM M. (1796-1863), was born in Philadelphia. He became editor of the

Philadelphia *Gazette* and other journals, and for many years was connected with the treasury department at Washington, and died at Trenton, N.J. He gave special attention to the subject of American money and banking, and his works still remain a principal source of information. He wrote *Short History of paper money and banking in the United States, to which is prefixed an inquiry into the principles of the system, with considerations of its effects on morals and happiness*, Philadelphia, 1833, 2nd ed. 1835, pp. xii., 140, 240. The historical sketch is valuable for the details concerning the organisation of American state banks, and the frauds and abuses associated with their management during a period when there was very lax legislative control. Gouge advised the withdrawal of bank-note issues, and the separation of the fiscal concerns of the government from the banking interest. A portion of this work was republished in England by William Cobbett under the title of *The Curse of Paper Money*. Gouge also wrote *An Inquiry into the expediency of dispensing with Bank Agency and Bank Paper in the fiscal concerns of the United States*, Philadelphia, 1837, pp. 56, in which he advised the establishment of a system of sub-treasury offices; and *The Fiscal History of Texas, embracing an account of its Revenues, Debts, and Currency from the commencement of the Revolution in 1834 to 1851-52, with remarks on American Debts*, Philadelphia, 1852, pp. 327. See also in the *Banker's Magazine*, v. 14, July 1859, "The Banks of the United States," pp. 3-9, in which he still insists upon restricting banks to the work of deposit, transfer, discount, and exchange. While employed in the treasury department under Mr. Woodbury, secretary of the treasury, he compiled several valuable reports.

D. R. D.

GOULD, SIR NATHANIEL (d. 1728), merchant of London, was knighted on 14th April 1721. He was a director of the bank of England and member of parliament for New Shoreham, Sussex, from 1700 until his death. He published (1) *An Essay on the Publick Debts of this Kingdom . . . To which is subjoined, An Enquiry into the General Convenience of reducing farther the Interest of our Publick Debts below 4 per cent per annum, in a Letter to a Member of the House of Commons*, London, 1726, 8vo; 2nd ed., 1727; reprinted in 1782, and in Lord Overstone's *Collection of Tracts on the National Debt*, edited by M'Culloch, London, 1857, 8vo. In this pamphlet Gould discussed the sinking fund, showing by the application of the principle of compound interest that it would in course of time more than suffice to pay off the national debt. Gould's work is one of the first in which this argument, which Dr. Price afterwards made famous, is met with. Gould also showed that the debt had been considerably reduced since 1716. His statements

were attacked in *A state of the National Debt as it stood Dec. 24, 1716, with the payments made towards the discharge of it out of the sinking fund, etc., compared with the debt at Michaelmas, 1725* [Attributed to William Pulteney and to Archibald Hutcheson], London, 1727, 4to; reprinted in the Overstone collection; and in *Remarks on a late book, entitled, An Essay, etc., In which the evil tendency of that Book, and the Design of its Author, are fully detected and exposed, etc., in a letter to a Member of the House of Commons*, London, 1727, 8vo. Gould replied to his critics in (2) *A Defence of an Essay on the Publick Debts of this Kingdom, etc.*, London, 1727, 8vo; reprinted in the Overstone collection. The controversy attracted considerable attention, and was alluded to in the House of Commons, 23rd Feb. 1727-28.

[*Treasury Papers*, lxxiv. 11; lxxxv. 116.—Horsfield, *Hist. of Sussex*, vol. ii. appendix, p. 55.—*Catalogue of Knights*.—*Return of Members of Parliament*, pt. i. 590, 597, 605; pt. ii. 6, 24, 33, 45, 56, 68.]

W. A. S. H.

GOURDE. Standard silver coin of Hayti (divided into 100 cents) of the same weight and fineness as the five-franc piece (see FIVE-FRANC PIECE).

F. E. A.

GOURNAY, JEAN CLAUDE MARIE VINCENT DE (1712-1759), the son of a rich merchant of Saint Malo, was sent by his father to Cadiz in 1729 and remained there until 1744, engaged in trade. But the young man's mind was not wholly absorbed in his business; and according to his *Éloge*, by Turgot, the fullest account we have of his life, his time was divided between study and his professional occupations and personal relations. From 1744 to 1746 he travelled in England, Germany, and Holland, carefully noting commercial and naval matters and keeping up a steady correspondence with M. de Maurepas, the French minister of navy. In 1746 his partner died and bequeathed him the whole of his fortune, including the estate of Gournay, from which the title under which he is known is derived. In 1748 Gournay returned definitively to France, purchased in 1749 a charge of councillor of commerce, and was appointed in 1751 one of the *intendants* of commerce. Having experienced heavy losses in 1758, he resigned, keeping the honorary title, and died in the following year.

Turgot accompanied him in some of his numerous tours of inspection through France, and sums up the opinions on commerce of his master in the following terms: "M. de Gournay concluded that the only object of the administration should be (1) to give to all branches of commerce that precious liberty . . . which they have lost; (2) to favour industry . . . by promoting the greatest possible competition . . . resulting in the greatest perfection in production and the cheapest price for the buyer; (3) to give at the same time to

the latter the greatest possible number of competitors, by opening to the seller all the markets for his produce" (*Éloge*, p. 19, by Turgot, see *Petite Bibliothèque Economique*). "He deemed it impossible that, in commerce left alone, private interest would not be conducive to the general interest" . . . (p. 12). "He was convinced that the money-trade, whose price is the interest paid on money, can only regulate this price with equity . . . by competition and reciprocal liberty" (p. 21). It is with these views, according to Turgot, that Gournay translated the works of Sir J. CHILD and Thomas CULPEPER (Paris, 1754), adding comments which have been lost. Gournay is generally considered as having embodied the "*Laissez nous faire*" of Legendre addressing COLBERT, in the well-known maxim, "*laissez faire, laissez passer*," but Dr. Aug. Oncken in his *Die Maxime Laissez Faire et Laissez Passer* (Berne, 1886, pp. 60-76) ascribes to the Marquis Voyer d'ARGENSON the first half of the formula. Dr. Oncken also refuses to follow DUPONT de Nemours in ascribing to Gournay considerable influence in the development of the physiocratic system (p. 99) and in considering him as a thoroughgoing free trader (p. 109); in fact the *Observations* which are printed along (pp. 72-90) with FORBONNAIS' *Examen des avantages et des désavantages de la Prohibition des Toiles Peintes* (Marseille, 1755), and which are thought to be written by Gournay himself, though very strong against prohibition, wind up with the proposal of a tax of 10 to 12 per cent on all printed calicoes imported into the kingdom (pp. 87-89). Still it must be allowed that the transition from absolute prohibition to a duty of 12 per cent means something more than "liberal mercantilism" (*Maxime*, p. 109). Excepting his translations, we possess no authentic writings of Gournay. Several are stated to have been written under his direction. This is undoubtedly true of the pp. 254-268 in the first volume of the *Corps d'observations de la Société d'Agriculture de Bretagne* (Rennes, 1760, see note p. 263). Dupont de Nemours is said to have affirmed that the *Considérations sur le Commerce et particulièrement sur les Compagnies, Sociétés, et Maîtrises*, Amsterdam, in 12mo, 1758) were composed by Clicquot Bervache under "the eyes and with the advice of Gournay," and the copy in the Bibliothèque Nationale in Paris bears the MS. note "par De Gournay" in a handwriting of the last century; but M. de Vroil, who inserts a copious analysis of this pamphlet in his *Étude sur Clicquot Bervache* (Paris, 1870), does not support this opinion.

E. ca.

For Gournay's administrative career see *l'administration du commerce au XVIII^e siècle* in app. to Biollay's *Pacte de Famille*. Paris, 1885.

GOVERNMENT, ECONOMIC EFFECTS OF. The economic effects of government on society are extraordinarily complex and elusive. In

an organic body it is well-nigh impossible to determine exactly the effect which any one organ exerts upon the others and upon the whole. For all the others react upon it. We may ascribe the progress of wealth or of poverty to the working of government, but we cannot be sure how far the government as well as the economic condition of that society is the result of national characteristics and natural conditions. Every general statement respecting the economic effects of different kinds of government must be regarded merely as a rude approximation. Subject to this caution, it may be said that government affects the economic condition of society chiefly in two ways, the one direct the other indirect. The direct economic influence of government is exerted in legislation, in executive action, in the administration of justice, and in foreign and colonial policy. The indirect economic influence of government is the result of its influence upon the character of the people.

I. Direct economic influence of Government.

—(1) Legislation. Scarcely any law can be framed which will not by a short or long chain of cause and effect produce some economic modification. But a direct economic influence attaches to legislation upon any of the following topics:

(a) The law of property determining the modes in which property may be acquired, the restraints imposed on its alienation, the rules of intestate succession, the limits of testamentary power, the degree to which ownership may be subdivided, the incidents of mortgage, the possible kinds of servitudes, the registration of title, and many other subjects.

(b) Commercial law, which regulates the making of contracts, the formation and dissolution of partnerships and joint-stock companies, the procedure in bankruptcy, the peculiarities of bills of lading and negotiable instruments, the rights and liabilities of bankers, the protection of patents, trade marks, and copyrights.

(c) The law of procedure, which determines in what manner redress for civil or punishment for criminal wrongs must be sought. Its economic influence will vary as it is more or less conducive to obtaining justice in a reasonable time and at a moderate expense.

(d) The criminal law, which, by defending liberty of person and security of property, makes industry and commerce on a large scale possible. Its economic usefulness will depend on its being complete, explicit, and severe enough to deter from crime without being so severe as to awaken general sympathy for criminals.

(e) Administrative law, which defines the objects of administration, creates the administrative bodies, and regulates their powers and procedure. Under this head may be placed all the laws which deal with national defence, the army and navy, public health, education, the relief of the poor, and the regulation of industry,

whether to protect the producer or to ensure the quality of the product.

(7) Financial and fiscal legislation, including all laws determining the standard and denominations of the currency, the incidence of taxation, imposing duties or granting bounties for the encouragement of native industry.

In dealing with the subjects above enumerated the legislator is obliged to consider (1) how much he will bring within the scope of his laws and how much he will leave to individual prudence or virtue; (2) when he is satisfied that legislation is expedient, how much weight should be allowed to purely economic as opposed to moral or political considerations,—in other words, when he should sacrifice the greatest immediate increase of national wealth to promote national security or moral and intellectual progress. The most judicious economists will not maintain that they possess any special knowledge enabling them to give dogmatic answers to these questions. Practical sagacity and political knowledge must determine at any given time the best limit to legislation. Arguments for non-interference based on the natural right of every man to do what he likes, and arguments for interference based on the organic character of the state, do not afford much assistance. The really strong argument for state interference is that co-operation is power, and that the state is the only, or at least the most powerful, co-operative organisation which can be used for certain purposes. The really strong argument against state interference is that it increases the power, in any case enormous, of governments which, under every constitution, monarchic, aristocratic, or popular, are usually composed of very ordinary men, subject to error, to indolence, and to sinister interests.

So, likewise, the choice between the greatest immediate addition to national wealth and some great moral or political gain must be decided, not by the special knowledge of experts, but by broad practical wisdom. But when the legislator wants to ascertain the causes which have resulted in the actual economic condition of society and the extent to which it may be ameliorated by new laws, he may with advantage take counsel of the economist. For such is the complexity of economic phenomena that a new tariff, a new poor-law, or a new regulation of the hours of labour, frequently produces results which its authors never expected and certainly never desired. In order to predict, so far as it is possible, the consequences of economic innovations, special knowledge and habits of scientific analysis are of the utmost value.

(2) *Executive*.—The various forms of administrative organisation and their principal economic effects have been described in another article (see ADMINISTRATION). Here only a few general observations need be added. It is an

English tendency to underrate the importance of administration as compared with legislation. For this there are several reasons. Parliament, the assembly which makes laws, is much the noisiest and most conspicuous part of the great machine of government. The administration of national and local affairs has for a long time past been tolerably pure and efficient. Lastly, many things which are elsewhere done by the public administration are here done by private enterprise. Thus we are prevented from realising how much depends on the integrity and efficiency of the administrative body, how terrible may be the consequences where the administrator is inert, corrupt or timid.

(3) *Administration of justice*.—Although the form of the law and the constitution of the courts are settled by the legislature, the quality of the justice actually administered depends on the integrity of the judges, their immunity from intimidation, and their power to enforce their decrees. We hardly realise the importance of the first of these conditions because with us it has been so long fulfilled. But where justice is venal all commercial transactions are affected with uncertainty. There is one law for those who can and will bribe; for those who cannot or will not bribe there is another law. The wrong-doer can escape retribution by dividing his spoil with the judge, and the injured man submits to a loss when he cannot afford to purchase redress. Such a pollution of justice destroys confidence and hope, the mainsprings of industry; and the misery thus engendered may be measured by the eagerness of orientals to find an upright judge. Immunity from intimidation is not less essential than integrity to the righteous dispensation of justice. Judges have at different times been liable to intimidation by powerful individuals—not rare in mediæval England, or by an arbitrary government—as in the reigns of the Stuarts, or by popular agitation, which is the only mode of intimidating that need be feared in western Europe at the present day. In all three cases the result is the same,—the operation of the law is rendered uncertain and the sense of security is deeply wounded. Lastly, there will be little benefit derivable from the integrity or the courage of the courts if they cannot enforce their decrees. Yet this elementary condition of order and economic progress has not been and even now is not universally satisfied in many parts of the civilised world.

(4) *Foreign and Colonial Policy*.—As there is no commonwealth of nations in which each is protected and controlled by an irresistible government, every state must trust to its own strength for the defence of its interests and even of its life. Thus political power is a primary condition of economic development. But nations do not grow into power sleeping. Only by unceasing vigilance, by untiring energy, and

by stubborn fighting courage, can a nation hope to become powerful. War always involves an interruption of industry and a destruction of wealth. But war does not always involve an ultimate economic loss. It may be the only means of securing an economic gain. It has been said that the seven great wars which England waged between 1688 and 1815 left no permanent result except the national debt. It would be far truer to say that the cost of these wars has been returned to England one-hundredfold. They procured for England the free development of her institutions, the supremacy of the seas, the largest share in the carrying trade, a colonial and an Indian empire, —all essential conditions of her economic progress. As founders of English prosperity Wolfe and Clive, Nelson and Wellington, rank with Hargreaves and Arkwright, with Watt and Stephenson. On the other hand, no permanent economic advantage resulted to France from her brilliant victories and European supremacy in the time of the first Napoleon. She sustained grave economic injury in the slaughter of so many of her bravest and most adventurous citizens, in the violent dislocation of her commerce, and in the false direction given to her energies. Thus there is no simple *a priori* rule for determining the economic effect of a foreign policy. Even if such a rule could be found, it would not be sufficient for our guidance apart from moral and political considerations. Colonial policy likewise has an influence upon national prosperity too extensive to be examined here.

II. *Indirect Economic Influence of Government.*—Whatever strengthens the national character and intelligence is economically beneficial. Therefore a political constitution which tends to develop the intelligence and character of the people tends to make them prosperous. In certain stages of civilisation this benefit is conferred by a powerful autocratic government which represses local feuds, breaks down the barriers of local prejudice, and compels a rude population to orderly industry. In other stages of civilisation the same benefit is derived from a large measure of political liberty. Political liberty is indeed a vague term. It means sometimes freedom from foreign domination, sometimes comparative freedom from interference by the national government, sometimes the possession of a vote in deciding who shall govern, and sometimes the right to take an active personal part in administration. But in any or all of these senses it is a means of prosperity to those who are fit to enjoy it.

Foreign domination involves the transference of a certain amount of wealth from the subject to the sovereign community, whether as mere tribute or in discharge of the cost of government and defence; it often involves

considerable interference with the commerce and industry of the subject for the benefit of the sovereign community, and it often depresses energy and intelligence by closing or at least narrowing the possibilities of a great career. These disadvantages, however, may be partly lessened, partly compensated, if the dominant people have much to impart to the conquered, whether in better laws and institutions or in improved mechanical appliances or in general intellectual cultivation. The subjugation of barbarous by civilised nations has been one of the principal means of human improvement.

Personal independence, the freedom of the individual, especially the freedom to associate with other individuals for common ends, is essential to the highest economic development. For that development cannot be attained except by a daring, inventive, and original people. Such a people will not submit to unreasonable and vexatious interference, or if it does, it will lose its most valuable qualities. It may continue to be noted for a plodding industry and a minute thrift, but these virtues are not enough to maintain its pre-eminence. The saying that England has been made by her adventurers will be found more or less true of every great commercial community. But even when personal independence has been too much restricted, the possession of a vote and the imagination that one can change the government whenever one has a mind, mitigate the sense of constraint and the consequent loss of energy. Lastly political freedom in the sense of the right to an active participation in public affairs would be highly stimulating to intelligence and character if men generally availed themselves of it. But this is rarely the case in civilised countries, where business, study, and pleasure absorb the energies of ninety-nine citizens in a hundred. It is a common complaint among ourselves that the composition even of the most important local assemblies tends to become worse rather than better. We cannot here consider how far this complaint is well founded. If such a deterioration were real and long continued, it would reduce self-government to an empty form.

[Adam Smith, *Wealth of Nations*, cp. bks. iv. and v.—J. S. Mill, *Principles of Political Economy*, bk. v. and on *Liberty* and on *Representative Government*.—Tocqueville, *Démocratie en Amérique*, passim.—Stephen, *Liberty, Fraternity, and Equality*.—H. Spencer, *The Man versus the State*.—Ritchie, *Principles of State Interference*.—Jevons, *The State in relation to Labour*.—Montague, *Individual Liberty*.—Dicey, *Law of the Constitution*.—Sidgwick, *Politics and Ethics*.—The literature of Free Trade and Protection generally; and the authorities referred to in the articles on ADMINISTRATION; BUREAUCRACY; CENTRALISATION; LAISSEZ-FAIRE.] P. C. M.

GOVERNMENT REGULATION OF INDUSTRY.

Earlier History, p. 239; In the 19th Century, p. 242.

Earlier History.—It will be convenient for the discussion of this topic to divide the survey into three main periods: (1) From the Norman Conquest to the time of Edward I.; (2) from Edward I. to Elizabeth; (3) from the days of Elizabeth to the decay of the mercantile system at the close of the 18th century.¹ In the first of these epochs interference with industry on the part of the government was considerably less than in either of the other two; the regulation of industry was left largely to local and municipal authorities, and that which emanated from the government may be described as of a personal nature, proceeding chiefly from the initiative of the sovereign. In the second period the whole field of national industry is regarded as under the supervision of the government, though much is still left to local municipal or corporate authority. Regulations became national and even international in character, being enacted for a distinctly national purpose; while in the third period the subordination both of industry and commerce to national purposes and national ends is more and more definitely aimed at. Of course in every period the influence of particular classes, whether landowners, merchants, or manufacturers, must be taken into account, as each class endeavours to modify legislation in accordance with its own particular interests.

I. Before the Norman Conquest, which is here taken as our starting-point, legislation on and interference with industry or commerce were only fragmentary in character. Such regulations as existed were chiefly framed by the king to secure the safety of merchants travelling in his dominions, to promote intercommunication and the proper conduct of trade generally (Cunningham, i. 75, and *Laws of Alfred and Ine*). To suffice for themselves in all industrial pursuits was the aim of the various villages, towns, or districts, though "there is no evidence that the early English villages valued their condition of self-sufficiency so highly as to try to check the development of trade, as had been done by German and Indian communities." Moreover it was perceived, at least by Alfred (*Boethius*, i. c. 17), that the common good depended on the interdependence of the various occupations of industry, and on their harmonious development and working. Royal control consisted chiefly in attempting to secure adequate protection for person and property so that this development of commerce and industry might be efficiently carried on. This royal control, however, became more powerful in many ways with the

consolidation of the feudal system in England after the Norman Conquest. That system rested almost entirely on royal authority; industry and commerce were regulated largely, when regulated at all, by royal decisions. The distinguishing mark of feudalism as regards industry is that royal authority supports local and traditional custom, while that custom left very little opportunity for the development of individual enterprise. Agricultural industry was hampered by the manorial system and collective ownership of land (see MANOR; AGRICULTURE IN ENGLAND), while prices both of agricultural and manufactured products were regulated by authority, e.g. by the ASSIZE OF BREAD AND BEER, which is considerably older than the reign of Henry II., and by the assize of cloth, which, though found in operation in the 13th century, even then refers to the "old assize of the mystery." The development of industry upon anything like a capitalistic basis was interfered with by the system of taxation, which practically discouraged accumulation by the operation of tallages, aids, and fines levied to swell the royal revenue. It should, however, be noted that at this period industry was only affected indirectly by taxation, for the taxes were (i.) not regular, but levied for special occasions of royal need, and (ii.) they fell not on regular incomes derived from industry or trade, or upon industry itself, but on the hoards of wealth accumulated by the rich in whatever walk of life. Also (iii.) in the case of tolls they represented payment given for royal protection. In other matters the whole conduct of industry was subjected to regulations of a local or private character emanating from the guilds (see GILDS and APPRENTICESHIP), or from municipal authority. Almost the only general regulation applying to the whole kingdom may be summed up in the arrangement of a uniformity of weights and measures (see ASSIZE OF WEIGHTS AND MEASURES), the assizes of bread, ale, and cloth, and other points in which the king and his court were directly interested as large consumers.

II. The reign of Edward I., inaugurating as it did the system of government, to some small extent at least, by the aid of the representatives of the nation—the first parliament in which all these representatives were summoned together in *one assembly* met in 1295—also inaugurates, as a result of this change in the method of government, a period when the regulation of industry becomes a matter of national and not merely local concern (see Cunningham, *Growth of English Industry and Commerce*, i. 265). It seems to have been the wish of the government of that day that industry should be regulated in the interests of the nation as a whole; not so much in order to gain national power as to increase the national wealth and to afford plenty to

¹ For later period, see FACTORY ACTS; GOVERNMENT REGULATION OF INDUSTRY IN THE 19TH CENTURY.

the people. There seems to have been also a wish to have definiteness and uniformity in prices and in taxation. In taxation, *e.g.*, fixed customs were levied, the half-mark on each sack of wool and on the *prisa recta* of two tuns on each shipload of wine. Anything beyond this was regarded as an occasional subsidy for a special purpose. This taxation interfered, however, to some extent with industry, for, chiefly in order to facilitate the collection of the customs, the export trade was regulated by the "staple" system (see STAPLE). The export of wool, *e.g.*, was hereby forced into definite channels and allowed only at certain ports by Edwards I. and III., who thus asserted the royal right of controlling trade. In other points it may be said that the Edwards legislated for industry with a view rather to the interests of the consumer than of anybody else, though Edward III.'s encouragement of Flemish immigration, in 1331 and other years, seems to point to a definite plan of increasing national wealth by promoting new industries; and his general legislation for the wool trade is a series of attempts to keep up a high price of wool to foreigners—an attempt largely successful, owing to the almost complete monopoly which England possessed in this commodity. The interference with industry that is marked in the reign of Edward III. by the historically famous First Statute of Labourers (the 25 Ed. III. c. i., A.D. 1351) is strictly in accordance with the spirit of the age in which that statute was enacted. It was the custom of the time to regulate prices by authority, and this interference on the part of the government did not cause discontent. Hence parliament was not enforcing a novelty when, in this First Statute of Labourers, and in many subsequent ones, it endeavoured to regulate the price of labour as well as of provisions and cloth. At the same time it cannot be denied that, owing to the peculiar circumstances of the period succeeding the Black Death (see BLACK DEATH), the legislation in regard to wages of workmen and their right to combine tended to become partisan legislation in the interest of the landowning classes who made the laws. Still we must be careful to observe that these statutes are in the main a fair attempt to regulate prices and wages together, so that one should follow the other. Another important object of all labour legislation from the 25 Edward III. c. 1 and the 12 Richard II. c. 4, was to secure a sufficient amount of labour for agriculture, as being the most important industry in the country, and also as being that in which the landowning legislators were most nearly concerned. (For a useful summary of the various statutes of labourers, cp. Thorold Rogers, *Economic Interpretation of History*, ch. ii.) In non-agricultural industries we may notice that in the period from Edward I. to, say, Henry VII.,

government interference becomes more and more marked, as it is more and more needed, owing to the unsatisfactory manner in which the gild system was now beginning to work, and owing to the great development of the manufacturing industries. In the reign of Richard II. this interference begins to assume the character that afterwards developed into the MERCANTILE SYSTEM (*q.v.*) of Elizabeth and the Stuarts, for it becomes an axiom that commerce and industry are to be regulated with the object of promoting national power through national wealth. Hence we find numerous statutes framed to encourage native shipping—the 5 Rich. II. st. I. c. 3 may be called our earliest navigation act—to attract bullion into our merchants' hands (5 Rich. II. st. I. c. 2), and to protect native industry against aliens (as by the 33 Hen. VI. c. 5 and the 22 Ed. IV. c. 3). Now, too, begins more definitely the era of the CORN LAWS (*q.v.*), whereby government tried to encourage arable farming as against the growing practice of sheep-farming for the sake of wool (cp. 12 Rich. II. cc. 3-7), to secure a large agricultural population (7 Hen. IV. c. 17), and to promote corn-growing by allowing the export of English corn (17 Rich. II. c. 7 and 15 Hen. VI. c. 2), and forbidding the import of foreign grain (3 Ed. IV. c. 2 and 23 Hen. VI. c. 5). In the Tudor period this feeling of a national policy grows stronger, and it is felt that the interest of the individual must be sacrificed to that of the nation, if, by so doing, national power will be increased. As national power seemed to depend upon the growth (1) of shipping, as a feeder to the navy; (2) of population, and especially agricultural population, as a feeder to the army; and (3) of treasure, we naturally find (1) the series of navigation acts continued (*e.g.* 23 Hen. VIII. c. 7, 2 & 3 Ed. VI. c. 19), and (2) the statutes of labourers kept up (*e.g.* 11 Hen. VII. c. 22), and the depopulation of rural districts through sheep-farming or migration to towns severely checked (4 Hen. VII. c. 16 applying to the Isle of Wight). Also (3) numerous acts were passed to secure a large supply of bullion for this country (cp. Cunningham, *Growth of Eng. Industry and Commerce*, i. 387). As the guilds were now decaying and their usefulness decreasing, we find the government reducing them more and more under its authority (1 Hen. VII. c. 5) till Somerset, following the policy of Hen. VIII., completed their ruin by confiscating their lands (1 Ed. VI. c. 14, A.D. 1547). At the same time the power of the guilds, especially of those which represented the working classes, being an object of jealousy to the Tudors, the government was by no means loth to interfere with them (cp. also the re-enactment of laws against combinations of workmen by the 2 & 3 Ed. VI. c. 15, and see COMBINATION LAWS).

III. In the Elizabethan code of regulations for industry we find government interference and the desire for the development of national power very strong. So distinctly was this the case that private interests came to be looked upon almost with disfavour, especially in the case of combinations of workmen (see COMBINATION LAWS). Legislation continues much on the old lines in (1) the Navigation Acts of 1 Eliz. c. 13, 5 Eliz. c. 5, and the more famous Acts of 1651 and 1660; (2) the Corn Laws of 13 Eliz. c. 13, of 15 Charles II. c. 7, encouraging the growth and export of corn, and again by the 35 Eliz. c. 7, which endeavours to force all surplus labour into agriculture, and by all the legislation which followed (see CORN LAWS); (3) the protection and encouragement of native manufactures by prohibiting foreign imports (5 Eliz. c. 7) and restricting the export of raw materials that might be worked up at home (as of wool and live sheep, in 8 Eliz. c. 3), while the consumption of native manufactures is to be encouraged, as by the law 13 Eliz. c. 19, providing that men must wear caps of English make. As regards interference with (4) labour and wages, the legislation of Elizabeth has well been termed monumental, and it continued to operate with practically little change till well into the 19th century. The famous Statute of Apprentices of 1563, the 5 Eliz. c. 4 (see APPRENTICESHIP) had for its objects to regulate wages in accordance with prices by assessment, to encourage good service by checking migration from one employer to another, to secure good work by making apprenticeship compulsory—seven years for artisans and longer for husbandry—and to encourage agriculture by making all those who were not otherwise employed serve in husbandry. It was meant to improve rather than to depress the condition of the labourer, and though afterwards much misused by employers, is a curious monument of kindly meant paternal legislation. This act did not apply to new trades that came into existence after 1563, and therefore these were regulated generally by provisions in the patents given to those who started them. In this code of legislation, however, no provision was made for supervising the quality of manufactures, as had been done in previous times (e.g. by the *aunager* for cloth; see *AUNAGER*). Hence we find the state now re-organising companies like the old craft-gilds (cp. Cunningham, as above, ii. 48) or granting to *patentees* rights of search and supervision of particular goods throughout the whole kingdom. This naturally led to monopolies being granted to individuals (see MONOPOLY), and monopolies again came to be a source of revenue to the crown. It must be said, however, in favour of the much-abused monopoly system, so prominent under the Stuarts, that theoretically at least it provided for the government a check upon

developments of trade that might prove detrimental to national interests.

The policy of the government in its interferences with industry after the Stuart period, and especially after the revolution of 1688, was to develop the industries of the country in every possible way. In the endeavour to carry out this policy England was only following the example of her continental neighbours, the Dutch and the French, for navigation acts and the protection of native industries were not by any means confined to England. The chief points aimed at by English statesmen of the 18th century were (1) the provision of a sufficient supply of raw material (e.g. of wool, and even of woollen yarn, 12 Geo. II. 21), by encouraging imports of such commodities and preventing their export; (2) the prohibition of the import of finished goods into British markets, while e.g. even Indian muslins and calicoes were subjected to strict regulations lest they should interfere with our linen trade (see 11 & 12 Will. III. c. 10); and (3) attempts were made to encourage the consumption of home manufactures, partly by sumptuary laws (e.g. by the 18 Geo. II. c. 38, and 21 Geo. II. c. 26, which imposed penalties for wearing French cambric or lawn), and partly by compelling the use of British commodities in certain cases (e.g. sail-cloth, 19 Geo. II. c. 27). The woollen cloth trade in particular was most carefully encouraged (see Cunningham, ii. 340), though both in manufactures and in agriculture the policy pursued tended to foster merely class interests. But if certain classes persuaded parliament to legislate in their own private interests, as one class in particular constantly did, parliament still believed that it was doing its best for the country. This was specially the case when the landed interest was the largest in the kingdom and when, as in the 17th and 18th centuries, agriculture was the foremost of our industries. But when the industrial revolution made itself felt in George III.'s reign, and the new manufacturing interests became more dominant, English industry outgrew very quickly the various regulations and restrictions originally intended for its benefit. The ASSIZE OF BREAD AND BEER, for instance, had even in 1709 to be revised (8 Anne, c. 18); the assessment of wages was fast becoming inoperative, and by 1795 seems almost to have been forgotten (Cunningham, ii. 359). In fact "the introduction of machinery brought about the collapse of the industrial system of Elizabeth"—a system of wonderful comprehensiveness that had gathered up the tentative legislation of previous centuries and left its mark, both for good and ill, on that of centuries that followed it.

[Cunningham, *Growth of English Industry and Commerce*, Cambridge, 1892, *passim*, the works of J. E. Thorold Rogers.—Ashley, *Economic History*, i. pt. 2. See also articles in this Dictionary on

APPRENTICESHIP; ASSIZE OF BREAD AND BEER;
MERCANTILE SYSTEM; MONOPOLY.]

H. de B. G.

GOVERNMENT REGULATION OF INDUSTRY IN THE 19TH CENTURY. The history of state action in England, during the present century, may be divided into two periods. In the earlier, the legislature was anxious to avoid interference with the economic and industrial action of individuals. In the later period, the legislature has become more and more disposed to regulate their activity. It must not be supposed that either tendency has operated at any one time wholly unchecked by the opposite tendency. The repeal of old and the enactment of new regulations have been, to a large extent, simultaneous. Nevertheless, there has been a marked change in public opinion, and in legislation on industrial questions. This change, being necessarily gradual and irregular, cannot be assigned to any one year. But the repeal of the Corn Laws in 1846 may be regarded as the last great achievement of the policy of *laissez-faire*. Since then the policy of state interference has been gaining the ascendancy. The circumstances of England, in the beginning of the 19th century, were propitious to the policy of removing all restraints on the economic action of individuals. The improvement of machinery was revolutionising commerce and manufactures. This revolution rendered the ancient system of regulation, dating chiefly from the reign of Elizabeth, totally inapplicable. The attempt to control prices and wages, to ensure a proper training of the workman, or a satisfactory quality of products, became more hopeless than ever. The incessant change and expansion of industry impressed reflective minds as some vast natural phenomenon which could not be guided or controlled. The middle class, which had gained so much in wealth and in political power by the industrial revolution, was instinctively averse to state control. Confident in its talent for business, its energy, and accumulated capital, it felt that, with freedom, it was more than a match for all competitors. The current philosophy fell in with the instinct of business men. It was deeply tinged by the optimism of the 18th century. The economic theory of Adam Smith, and the legislative theory of Bentham, are alike pervaded by a belief in the beneficence of nature or of Providence. Nature or Providence, according to these theories, so orders human life that the endeavour of each to secure his own happiness produces, automatically, the happiness of all. It follows then, that, in almost every case, the state does most for the general welfare by allowing everybody to do the best he can for himself. And thus, in the first half of the 19th century, the economic facts of the time, the instinct of the class which was acquiring political predominance, and the

philosophical theories generally received among thinkers and statesmen, all tended to reduce the action of the state within the narrowest possible bounds.

The result was seen in legislation. The apprenticeship and combination laws were repealed. The exclusive privileges of corporate towns were abolished. The poor law, which had been expanded into a system of supplementing wages out of rates, was reformed, and became merely a provision for the destitute. The protective tariff was gradually abolished. But whilst the old forms of state regulation were disappearing, the course of events and of speculation were bringing about a reaction in favour of state interference. For, as the new industrial system developed, it was found to produce evils which individual action could not remedy. These evils led to legislation, for workers in factories, as early as the year 1802 (see *FACTORY ACTS*). The wage-earning class, which has gradually acquired the largest share of political power, has always felt that its strength lies in combined action—not in individual enterprise—and has usually favoured the principle of state regulation. At the same time, philosophical reflection has taken new forms. The belief in the beneficence of nature has given place to the doctrine of the struggle for existence. This doctrine is incompatible with the notion that the general interest is best secured by everybody's endeavour to promote his own interest. Thus philosophers have become more willing to accept the deliberate regulation of industry by an authority which, at all events, professes to represent the whole community. The reaction towards mediæval ideas, expressed in the high church movement, and in the writings of Carlyle and Ruskin, has also contributed to lessen the value formerly attached to individual responsibility and individual freedom. A third influence, favourable to the extension of state control, may be found in the literature and philosophy of the most civilised continental peoples—especially of the Germans. At the beginning of this century the English people, isolated by its long war with France, and proud of its achievements in that war, had touched the highest point of arrogant self-confidence. Englishmen were inclined to regard all imported theories with suspicion, and, if they related to commerce or industry, with contempt as well. All this has been changed. The material progress of other nations has raised their standing in English eyes. The political and economic pre-eminence of England has been much reduced. Increased facilities for travel and transmission of intelligence have made the Englishman more cosmopolitan. The vast space which the action of government fills in such countries as France or Germany, and the audacious theories which it has generated, have made a deep impression on the English mind.

Lastly, the benevolent despotism which we have established in India, with at least a wonderful apparent success, has re-acted on English political ideas, and has recommended state action to many who would not have been accessible to speculative arguments.

The practical result of the change in public opinion, insensibly produced by all these agencies, is seen in the sweeping legislation of the last forty years. During that time the state has extended its activity in every direction. Following up its first hesitating interference on behalf of children employed in factories, the state has taken steps to secure the safety, health, and comfort of persons engaged in almost every dangerous or unwholesome occupation, whether in mines, in ships, or in factories. It has provided a complete system of gratuitous elementary education. In Wales it has organised secondary education, and everywhere it has begun to promote technical education. It has established an elaborate sanitary administration. It has increased the functions of the post-office, acquired the telegraphs, and re-adjusted the rates charged for the carriage of goods by railways. It has augmented the burthen of taxes, and the number of workmen and officials whom it employs. It has enlarged both the duties and the revenues of local authorities. But all that the state has done is little in comparison with that which it is incessantly called upon to do. It is invited to appropriate the "unearned increment" of the land, or the land itself, at least in towns; to acquire all mines; to regulate the hours of labour for all workmen; to secure to them and their families good lodgings at low rents; to feed their children whilst at school; to cater for their amusement; to provide them with pensions when past work; to take over one branch of industry after another, as fast as it can find the requisite capital and organise the requisite staff; in short, to enter upon a course of development which would finally make state action co-extensive with the life of society.

It would be difficult, if not impossible, to attempt an exact estimate of what has hitherto been done in extending the action of the state, or to criticise the proposals for its further extension. Few reasonable men will be disposed to agree with the extreme doctrine of *laissez-faire* inculcated by Mr. Herbert Spencer. They will rather incline to judge each new proposal for state interference upon its merits, testing it especially by means of recorded experience. At the same time they will remember that human nature, whilst capable of gradual modification within certain limits, is, in its main attributes, unchangeable. They will remember that the action of the state is, after all, the action of a number of rather commonplace human beings, and they will be

slow to accept any political scheme which puts an enormous strain upon the industry, intelligence, or honesty of those who administer the commonwealth.

[Mill on *Liberty*.—Herbert Spencer, *The Man Versus the State*.—Jevons, *The State in Relation to Labour* (English Citizen Series).—Ritchie, *Principles of State Interference*.—Cunningham, *Growth of English Industry and Commerce in Modern Times*.—Toynbee, *Industrial Revolution*.]
F. C. M.

GRACE, DAYS OF. See DAYS OF GRACE;
BILL OF EXCHANGE, LAW OF.

GRADING. In many markets dealings take place without inspection either of samples or bulk, but upon the basis of certain standard qualities or values, and for this a properly organised system of grading is necessary. Whether the bargains are for consumption or speculation it is equally necessary that sellers and buyers should know exactly what it is they undertake to deliver or receive. In the metal trades the requisite uniformity is obtained by assay. Dealings in bullion on the London market are on the basis of the mint standards. The bars delivered are usually fine, but are reduced to uniformity by calculation on assay. In copper most bargains are in "G. M. B." bars—"good merchantable brands" of about 96 per cent, with allowances for difference in deliveries. In pig-iron there are recognised qualities with different prices for brands of different makers. Raw or thrown silk and wool are capable of containing a considerable amount of moisture, which is not apparent to sight or touch, and which materially affects the value in proportion to weight. It is therefore usual to require a certificate from one of the conditioning houses (see *CONDITIONING*), as to the proper degree of dryness of every parcel. In mineral oils, quality is tested by special associations, and the certificates of the Petroleum Association in London, and of the United Pipe Line in the United States, are the customary basis of transactions.

In proportion as the articles dealt in are less modified by art, the possibility of bringing them to a fixed basis is diminished, and it becomes necessary to grade them by comparison of their actual condition with some more or less definite standard. Thus the great wheat deals in the States are made in No. 1, 2, or 3 quality, and it is alleged that the arbitrary manner in which a farmer's produce may be graded opens a way to great injustice and fraud. Grading or some means of insuring uniformity of quality is essential in all dealings that are to be settled through a clearing house, as all clearing systems are founded upon the principle that delivery by the first seller is acceptable to the last buyer (see also *CLEARING SYSTEM, LONDON*; *PRODUCE CLEARING*).
R. W. B.

GRADUATED TAXATION

Meaning of terms, p. 244; History of, in different countries, p. 244; Athens, Florence, Holland, Great Britain, Switzerland, Australasia, New Zealand, Canada, p. 244; Theory of, p. 246; Arguments for, p. 246; Arguments against, p. 248.

GRADUATED TAXATION, TERM. The term "graduated taxation" is commonly used in contrast to "proportional taxation." Proportional taxation implies the same rate on all amounts of the thing taxed, whether it be property, income, or anything else. Graduated taxation generally means that the rate increases as the amount of property, income, etc., increases. More accurate is the term *progressive taxation*. For in a graduated tax the gradation may be either upward or downward. If the gradation is upward we have progressive taxation; but if the gradation is downward, that is, if the tax rate decreases as the income increases, we have what is technically known as *regressive taxation*, or what the French call *upside-down progressive taxation* (*progression à rebours*). When the tax rate increases up to a certain point, but remains constant beyond that point, the technical term is *degressive taxation*. That is, the proportional rate is regarded as the normal rate, but on all sums counted downward below this limit the rate diminishes. In one sense it is immaterial whether we call the tax progressive or degressive. But in degressive taxation the proportional rate begins at a comparatively low figure and is considered the normal rate, concessions being made for the smaller amounts; while in progressive taxation the point at which proportion begins is generally put higher up, so that most of the assessments are made at varying rates. The term "graduated taxation" is commonly understood to imply progressive taxation. Strictly speaking the English income tax, with its system of exemptions and abatements below £500, is an example of degressive taxation, and therefore of graduation. But when we speak of the income tax being "graduated," we commonly mean not the present system of degression, but a development of the progressive principle. While graduated taxation therefore technically includes progression, degression, and regression, the term will be here used in the sense of progressive taxation.

Another possible source of confusion must be avoided. If a different rate of tax is levied on different kinds of property or income, we speak not of a graduation but of a differentiation of the tax. But if different rates are levied on inheritances or bequests according to the degree of relationship of the heir or successor, the tax is also called a *graduated* or *progressive* tax. In ordinary cases "graduation" denotes a changed rate for altered amounts; in this case it denotes changed rates for the same amounts going to different persons. In the following discussion the term will be confined to the first and more important case.

History of Graduated Taxation.—The earliest example of graduated taxation is found in Athens. The direct tax (*εἰσφορά*), as levied by Solon (B.C. 596), was an extraordinary property tax divided into four classes. The graduation was introduced not by changing the legal rate, but by changing the assessable portions of the property. Thus the highest class was assessed at the full valuation; in the second class only five-sixths of the property was assessed; in the third class only five-ninths of the property was assessed; while the lowest class was entirely exempt. When we hear of the tax again in the time of Nausinicus (B.C. 380) the principle of graduation was still observed, although in a slightly modified form. In Rome we have no knowledge of any graduated taxation.

In the middle ages there are several examples, due to the growth of the democratic spirit, especially in the towns. There are but few cases of graduation in the general state taxes. In France the principle of *le fort portant le faible* brought about an application of the graduated scale to the poll and hearth taxes in the 14th century. But the assessors generally inverted the legal principle and made the poor pay higher rates than the rich. Based on these French laws were the English graduated poll taxes of 1379 and 1380, repeated in 1513 and 1641; and the graduated income taxes of 1435 and 1449. In the German empire a progressive property tax was imposed in 1512 in order "that the poor should not be so grievously burdened."

It is chiefly in the mediæval towns that graduated taxation was employed. We have full accounts of its history in Basel and other German towns during the earlier centuries of their existence. But the originally democratic character of the towns was soon modified by aristocratic and feudal influences; and the system soon actually became one of real inequality, pressing more heavily on the poorer classes. We know that this was the case on the continent; and when the history of English local finance comes to be written, it will probably be found to be the case here also. In some places, however, the democratic spirit asserted itself more radically. This is especially true of the Italian republics, whose condition at the period of their great commercial prosperity resembled those of modern cities very closely. The Italian cities, and especially Florence, are the chief examples of graduated taxation in the middle ages.

In Florence at first a general property tax (the *ESTIMO, q.v.*) was employed. In 1427 this was supplanted by the *CATASTO (q.v.)*, or tax on the capitalised value of incomes from movables and immovables, which itself gradually gave way to the *decima*, or tenth, a tax on the income from immovables only (see *DÉCIMES*).

The principle of graduation was first applied to the *catasto* in 1443, under the name of *scala* or scale. One of the chief reasons of its introduction was the evasion of the proportional tax on personal property by the wealthy, and the hope to re-establish the balance in some sort in this way. But the Medici eagerly seized on this course of reasoning, and soon converted the graduated tax into an engine for ruining their wealthy rivals. The rates varied at different times during the 15th century; some of the more extreme scales were 4 to 33½ per cent of the income, and 8 to 50 per cent. The *decima scalata* was one of the causes of Florence's downfall. But it is to be noted that what was begun by the Medici was continued by the democratic government, and that Canestrini, the historian of the tax, expressly tells us that the fault lay not so much in the graduation as in the frequency and burdensomeness of the taxes, and the utter arbitrariness of the whole tax administration. The graduated tax was levied for the last time in 1529.

During the 17th century we hear but little of graduated taxation. In the 18th century we find more frequent examples, until the revolution of 1789 and especially that of 1848 gave the signal for a far more wide-spread application of the principle during the present century.

In 1742 we find a classified income tax in Holland, a progressive income tax (from 1 to 8 per cent) in Prussia. In Geneva the *taxe des grades* of 1789 was levied on a slightly graduated scale. In England Lord North's tax on inhabited houses in 1778 was graduated. This tax was repealed in 1834; reimposed without graduation in 1851. Graduation on a degressive plan was introduced into it again in 1890. The French tax on rental values of 1791 was also graduated, as was the United States national tax on dwelling houses in 1798. In Holland, Austria, Baden, and Prussia we find extraordinary property or income taxes levied on the same principle during the first two decades of this century. The graduated principle was also applied in a modified form in Great Britain in the Triple Assessment of 1798 and in the income tax of 1799, the full charge beginning only with incomes of £200 (after 1803, £150).

From about the middle of this century dates a more decided movement toward graduated taxation in the continental countries of Europe, and the last decade or two have witnessed a decided extension of the movement in other parts of the world, including Australia and America. While important examples of graduated taxation are found in the monarchic countries of Europe, the most radical attempts to carry out the principle are found in democracies like those of Switzerland, and Australasia.

In Germany graduation is found both in

commonwealth and in local finance. The new Prussian income tax varies from 1½ per cent on incomes of 900-1050 marks to 4 per cent on incomes above 100,000 marks. In Prussia, as well as Saxony and other German states, incomes are divided into a large number of classes, and a definite amount of tax is payable for each class. The rate, therefore, varies slightly between the highest and lowest limit of each class. In Baden the system of *Steueranschläge* is followed, according to which only a portion of the actual assessed income is taxable in each class. In the lowest class (500-600 marks) one-fifth of the lowest income is taxable, while the total income is taxable only when it exceeds 30,000 marks. This is the same principle as that of Solon's tax in Athens. In many of the German towns there also exist graduated income taxes, ranging from 1 per cent to 4 or 5 per cent, and in some cases even to 10 or 12 per cent of the income. The municipal income tax, as a general rule, is based on the same assessment and the same principles as the state tax. There is no separate system of graduation.

In Switzerland graduated taxation of property or income exists in some form in sixteen of the twenty-five cantons, while the progressive inheritance tax is found in six cantons, graduated taxation of some kind existing in eighteen out of the twenty-five cantons. In regard to graduated taxation of property or income there are three classes of cantons: (1) Cantons with proportional property tax but graduated income tax, Ticino, St. Gallen, Thurgau, and Oberwalden. The highest rate of the income tax does not here exceed 4 per cent. (2) Cantons with graduated property tax, Geneva and Glarus. (3) Cantons with graduated property and income taxes. Most of the cantons with a property tax levy an income tax on income not derived from property (Baselstadt and Baselland levy it on other incomes also). The graduation is generally much sharper in the income tax than in the property tax, and the rate is in some cases almost 10 per cent.

In so far as the technique of administration is concerned, the cantons may be divided into four classes: (1) Those where different proportions of the assessed income or property are taxable in each class, as in Zürich. (2) Those where the income is capitalised at different rates in each class, as in Solothurn. (3) Those which change the rate for each class, or fix upon a definite sum to be paid by each class. This is true of most cantons. In general a definite rate or sum is charged upon the entire income or property. But a few cantons, like Basel, Zug, Schaffhausen, Aargau, and Vaud, assess the stipulated rate upon each successive increment of the entire amount.

There are many interesting but minor points of difference which it is impracticable to dwell

upon here. But the tendency is toward the spread of the principle of graduation and the increase in the scale. The graduated inheritance taxes are found in Bern, Solothurn, Thurgau, Zürich, Uri, and Schaffhausen.

Graduated income taxes are found also in the local taxes of Belgium and Holland, in the national income tax in Holland, and to a certain extent in Denmark and Sweden. In England outside of the depression in the income tax, graduation is found only in the death duties (see DEATH DUTIES; TAXATION), and in the present INHABITED HOUSE DUTY. In France and Austria the chief instance of graduation is seen in the rental or occupancy tax.

In Australasia we find in most of the colonies graduated inheritance taxes, ranging from 1 per cent to 10 per cent (and in Queensland even to 20 per cent). Here are seen not only the highest graduated inheritance taxes in the world, but also the highest graduated property and income taxes. The most recent act is that of 1891 in New Zealand, which, as lately amended, graduates the land tax from 1d. to 3d. in the pound, according to the value. Graduated property taxes are found also in some of the other colonies.

In the United States the income taxes levied during the civil war were sharply graduated, ranging up to 10 per cent. The income taxes levied by the Confederacy ranged from 5 to 15 per cent, and, in the case of corporate incomes, to 16 $\frac{2}{3}$ per cent. Graduated income taxes were also formerly levied in Virginia. To-day a slightly graduated income tax is still levied in North Carolina. The taxes on corporations are graduated in several of the states, as in Maine (where the excise tax on railways varies from $\frac{1}{4}$ of 1 per cent to 3 $\frac{1}{4}$ per cent of the earnings), Vermont, Wisconsin, Michigan, etc. There is now a strong movement looking toward the adoption of the graduated principle in inheritance taxes, and bills to that effect are pending in several states. In Canada graduated inheritance taxes have recently been introduced in Ontario and Nova Scotia.

Theory of Graduated Taxation.—Graduated taxation has been upheld on three grounds which may be termed, for want of better names, the socialistic, the compensatory, and the economic arguments. The socialistic theory has been advanced, not only by socialists proper, but by economists of repute, like Adolf Wagner, who are opponents of socialism in general, but who propound this particular argument under the name of the socio-political theory. They distinguish between the "fiscal" and the "socio-political" periods in public finance. In the last period, which is now beginning, government must regard it as a duty to bring about a more equitable distribution of wealth, and therefore to interfere with the so-called rights of private property. It is the ethical or social

reasons which justify graduated taxation. This argument may, however, be unconditionally rejected. Although in all fiscal policy there is an undoubtedly social element, this must not be confounded with the socio-political or socialistic element. From the principle that the state may modify its strict fiscal policy by considerations of general national utility to the principle that it is the duty of the state to redress all inequalities of fortune is a long and dangerous step. If the equalising of fortunes were an acknowledged function of government, it would be useless to construct any science of finance. There would be only one simple principle: confiscate the property of the rich and give it to the poor. This argument for graduated taxation is not very strong.

What is called the compensatory argument has been advanced by writers like Royer in France and General Walker in the United States. The latter, *e.g.*, states that differences in wealth are due in no small degree to the failure of the state in its duty of protecting men against violence and fraud; and that they are in a measure due to the acts of the state itself for a political purpose. Since therefore inequality of wealth is in a measure due to the state's acts of omission or commission, allowance should be made for it in the tax system; and this can best be done, theoretically at least, through graduated taxation. The objection to this theory is that it furnishes no standard. If graduation is *per se* unequal, it is impossible to correct one inequality by another unless it can be shown that the second will in every respect fit into and counterbalance the first. The test is impracticable.

Similar to this, but of somewhat greater force, is what may be called the "special compensatory" argument. This upholds graduation in some one particular tax, on the ground of its acting as a counterpoise to other taxes. Indirect taxes, *e.g.*, it is claimed, often hit the poor harder than the rich; hence the regressive indirect taxes must be counterbalanced by progressive direct taxes, like a graduated rental tax, or a graduated income tax, etc. Proportional taxation is still the ideal, but the departure from proportion in one direction must be met by an equal departure in the opposite direction. Some ultra-conservatives, like Leroy-Beaulieu, advocate graduated taxes for this reason.

Arguments for Graduated Taxation.—The most important of these are what may be called the economic arguments. They turn about the general theories as to the basis of taxation. The older doctrine of taxation was that of benefits. Since protection was deemed the chief benefit conferred by government, taxes were regarded as insurance premiums paid for enjoyment of security. Hence, it was argued, taxation should be proportional to the property or income protected. Some writers, however, maintain

that the benefits to the individual increase faster than his property or income, since most public expenses are incurred to protect the rich against the poor, and therefore that the rich ought to pay not only absolutely but relatively more. Others have said that certain state expenses confer a proportional benefit on all, but that many kinds of governmental outlay have a special value for the rich. Others confessed that the benefits of state action are theoretically enjoyed by all, but maintained that practically the benefits accrue only to the wealthier classes. Others finally tried to prove mathematically that protection increases faster than property or income. A million pounds belonging to one man is in greater risk of being stolen than the same amount distributed among ten men. Hence the insurance premium ought to be higher. All these writers, arch-individualists as they were, therefore were forced to demand graduated taxation, which other individualists branded as arch-socialism.

These arguments for progressive taxation are not very strong, and if there were space it might easily be argued that if protection or benefit is to be the test of taxation, the scale should be graduated downward not upward. But it is unnecessary to do this, because the whole benefit theory of taxation has almost everywhere been abandoned in favour of the faculty or ability theory. Since individuals do not pay taxes in the ratio of the protection of the state, the arguments, whether of proportion or of graduation, founded on this theory are equally inconclusive. The give-and-take theory of taxation has been replaced by the faculty theory.

According to the faculty or ability theory, every man should contribute to the public burdens according to his ability. But does ability connote a proportional or a graduated tax? Originally taxation of faculty denoted a proportional tax on property, then a proportional tax on income. Already in the 18th century, however, the so-called "clear income" theory was developed, according to which only that part of income which exceeded what was necessary for existence was declared taxable. The minimum of existence was exempted. It is readily seen that if a definite sum is always exempt, the resulting tax would not be strictly proportional, but graduated, as to the whole income, although it would be proportional to a certain excess of income.

The original concession was soon broadened. Not only the satisfaction of absolutely necessary wants but the satisfaction of all wants now became the watchword. In other words, the idea of burden or sacrifice was introduced. Faculty or ability to pay taxes was declared to be measured by that proportion of income the loss of which would impose upon the individual

an equal burden or sacrifice with his neighbour. All wants vary from the absolutely pressing wants of mere subsistence to the less urgent wants which can be satisfied by luxuries. The sacrifice involved in giving up a portion of what enables us to satisfy our necessary wants is very different from the sacrifice involved in giving up a portion of what enables us to satisfy our less urgent wants. In order to impose equal sacrifices we must tax the rich not only absolutely, but relatively, more than the poor. That is, the tax must be not proportional but progressive. It is simply an application of the final utility theory of value to taxation.

It may indeed be confessed that this theory does not logically result in any mathematically exact scale of taxation. The imposition of equal sacrifice on all tax-payers must always remain an ideal impossible of actual realisation. Sacrifice bears no absolutely definite relation to amount of commodities. No calculus of pains and pleasures can suffice. Moreover, the sacrifice occasioned by a tax, even if it were absolutely measurable, is only one factor in the problem, and may in individual cases be a minor factor. So that it is utterly impossible to say whether the identical tax on people of identical income will produce the same relative pressure or occasion an equal sacrifice. The attempt to ascertain a mathematical scale of progression must necessarily fail.

Nevertheless graduated taxation may be upheld on the faculty theory. For the elements of faculty are twofold, those connected with acquisition or production, and those connected with outlay or consumption. Now as regards the first set of elements, the possession of large fortunes or large incomes in itself affords the possessor a decided advantage in augmenting his possessions. A rich man may be said to be subject in some sense to the law of increasing returns. The more he has, the easier it is for him to acquire still more. From this point of view faculty may be said to increase faster than fortune or income. This element of taxable capacity would not illogically result in a more than proportional rate of taxation.

On the other hand, the elements of faculty which are connected with outlay or consumption bring us back to the sacrifice theory. Now while the sacrifice theory is not sufficient to make us demand any fixed scale of graduation, it cannot be claimed that it leads necessarily to a fixed proportion. If we never can reach an ideal, there is no good reason why we should not strive to get as close to it as possible. Equality of sacrifice, indeed, we can never attain absolutely or exactly, because of the diversity of individual wants; but it is nevertheless most probable that in the majority of normal and typical cases we shall be getting closer to the desired equality by some departure from pro-

portional taxation. If we take a general view and treat of the average man—and the state can deal only with classes, that is with average men—it seems probable that on the whole less injustice will be done by adopting some form of graduation than by accepting the universal rule of proportion. A strictly proportional rate will make no allowance for the exemption of the minimum of subsistence. It will be a heavier burden on the typical average poor man than on the typical average rich man. It will probably be more severely felt, relatively speaking, by the average man who has only a small surplus above socially necessary expenses, than by the average man who has a proportionally larger surplus.

Hence if we base our doctrine of the equities of taxation on the theory of faculty, both the production and the consumption sides of the theory seem to point to graduated taxation, as at all events lacking in neither logic nor justice.

Arguments against Graduated Taxation.—The arguments against graduated taxation are of two classes—theoretical and practical. In the first class the following are frequently urged:—

1. Graduated taxation is arbitrary and uncertain. This is true in a sense, but it proves too much. For an uncertain rate, if it be in the general direction of justice, is nevertheless preferable to a rate which may be more certain but less equitable. A stability which is unjust is not preferable to an instability which works in the general direction of what is recognised as justice. It is possible that the ostensible certainty of proportion may involve a really greater arbitrariness.

2. Graduated taxation is confiscation, because it must end by swallowing up the whole capital. This objection may be completely obviated by making the graduation itself degressive, so that it would become impossible to reach 100 per cent or any like percentage of large fortunes.

3. Graduated taxation is unprofitable, for the yield will be no greater than with proportional taxation. This, even if true, is no valid objection. For it assumes that the state desires to obtain larger revenues, whereas in reality it desires simply to attain greater justice. If graduation is theoretically more equitable than proportion, the given amount ought to be raised by the first rather than by the second method. If indeed graduation involved a positive loss of revenue, the case would be different. But this has been claimed by no one.

4. Graduated taxation acts as a check to industry and saving. This objection would apply only to such an excessive scale as would swallow up the entire surplus of income—and such a scale has never been known or even proposed. For if the receiver of the larger profits, after paying the graduated tax, is still in

possession of a larger net income than his neighbour who with a less product pays relatively less taxes, there is no reason why he should cease to produce or accumulate. He will indeed be less wealthy than before, but his surplus will still be greater than if he stopped production. The objection is applicable to the abuse, not the use, of the principle.

The practical objections to graduated taxation are of greater weight. These are:—

1. Graduated taxation tends to augment fraud. Even under the proportional system property and income taxes in most countries, as actually administered, are honeycombed with fraud. The larger the property or income, the greater the opportunity and inducement to undervalue and conceal. The increase of the rates through graduation is apt to greatly accentuate the tendency. The greater the ostensible equality, the greater the real inequality.

2. Graduated taxation will lead to an exodus of capital. This is true only on the assumption that the system is not a universal but a particular one. If a graduated scale is applied in one town only, or in one province or commonwealth only, the tendency toward migration of capital to a neighbouring town or province will be perceptible. The larger the area of the tax system, the less the inducement to migration. But the tendency is always present although its force has often been exaggerated.

3. Graduated taxation, unless applied to the entire property or income, may work practical injustice. In the English local rates, *e.g.*, holding A may be worth more than holding B, but A may be owned by two persons and B by only one. Or the owner of the smaller holding B may have a hundred other small holdings in other parts of the town or country, while the owner of A has only that one. A higher tax on A, because it is the larger holding, would make the poorer man pay more than the richer man. Graduated taxation of property would here involve absolute injustice. The same would be true of many land taxes, of the property tax as administered in the United States, and of the income taxes in those countries where the assessment is made not on the entire income, but, as in England, separately in different schedules. This objection would not apply to cases of actual general income, or general property, or general inheritance taxes. And it is therefore chiefly in these forms of taxation that the most recent application of the graduated principle has been made. But whenever the tax is of a partial character—and this is frequently the case—graduation would be inadmissible and practically dangerous.

While, therefore, graduated taxation is on the whole defensible as an ideal, and as the expression of the theoretical demand for shaping taxes

to the test of individual faculty, it is a matter of considerable difficulty to decide how far, or in what manner, the principle ought to be carried out in practice. Theory itself cannot determine any definite scale of graduation. And considerations of expediency, as well as the uncertainty of the inter-relations between various parts of the entire tax system, should tend to render us cautious in advocating any general application of the principle.

[All the general works on the science of finance discuss this problem. For special studies see Seligman, "The Theory of Progressive Taxation" in *Political Science Quarterly*, vol. viii. No. 2.—more fully, Seligman, *Progressive Taxation in Theory and Practice*, 1894, where a complete bibliography may be found.—Cp. also Sax, "Die Progressivsteuer" in *Zeitschrift für Volkswirtschaft, Socialpolitik und Verwaltung*, 1892; Condorcet, *Sur l'impôt progressif*, 1792.—Meyer, *Die Principien der gerechten Besteuerung*, 1888.—Neumann, F. J., *Die progressive Einkommensteuer*, 1874.—Scheel, *Die progressive Besteuerung*, in *Zeitschrift für die gesammte Staatswissenschaft*, vol. 31 (1875).—Vauthier, *De l'impôt progressif*, 1851.—Cohen-Stuart, A. J., *Bijdrage tot de Theorie der progressieve Inkomstenbelasting*, 1891.—Bastable, C. F., *Public Finance*, 1892, bk. iii. ch. iii. "The Distribution of Taxation." For the United Kingdom and the alteration in graduation of the death duties made by Sir W. Harcourt's Budget of 1894, see TAXATION.

For Switzerland in particular, see R. H. Inglis Palgrave, "Progressive Taxation as levied in Switzerland," in *Journal of the Royal Statistical Society*, 41-225, 1888).—Foreign Office Report No. 267, Miscellaneous Series, 1892, *Report on the different systems of graduated Taxation in Force in Switzerland*.—"Text of Property Tax of Canton Vaud" in *Quart. Journal of Econ.*, 1887-88.—Cohn, "Income and Property Taxes in Switzerland," *Pol. Sci. Quart.*, 1889.—Schanz, *Die Steuern der Schweiz*, five vols. 1890.—Prof. Greven, "Fiscal Reform in Holland," *The Economic Journal*, 534-540, 1893.] E. R. A. S.

GRAHAM, SIR JAMES GEORGE ROBERT (1792-1861), was born at Netherby, in Cumberland. He was educated at Westminster and Christ Church, Oxford; and in 1813, as private secretary to the British minister in Sicily, took part in the negotiations with Murat at Naples. After his return to England he entered upon a political career, and was returned for Hull in the whig interest in 1818. He was a close student of political economy, and now translated its principles into practical action on his father's estate. In the civilisation of the borderland and the improvement of agriculture, he did excellent work. Small tenants, who mainly lived by poaching, were replaced by thrifty industrious farmers; the breed of stock was vastly improved; cottages and farm buildings were rebuilt, and drains were introduced, large tracts of marshy land being thereby reclaimed. Under young Graham's guidance,

Netherby farming gained a high reputation among agriculturists. As the result of his studies in political economy, Graham published in 1826 his pamphlet entitled *Corn and Currency*. In this treatise, which gained wide circulation, the writer demonstrated the futility of the efforts made by government to regulate by law the price of money and the price of goods. He also showed that there was an intimate relation between the corn laws and the currency, and his conclusions, as a whole, favoured free trade and free banking. He also took an active part in reforming the system of county finance. Graham succeeded to the baronetcy in 1824, and in 1826 was elected liberal member for Carlisle. In the ensuing year he was returned for Cumberland, and in matters of finance and commercial legislation associated himself with the enlightened policy of Huskisson. Economical reform nearly attracted his attention, and in 1830 he made his mark in the House of Commons by his motion for the reduction of official salaries, his reputation being further increased by an attack on the salaries received by privy councillors. As an advanced reformer, he was offered by Lord Grey the post of first lord of the admiralty, which he accepted, and was one of the committee of four to whom was entrusted the preparation of the first Reform Bill. While at the admiralty, Graham rendered essential service in reforming the finances of the department. Soon after this, however, he began to recede from his position as a reformer. His last attempt at economical reform was the introduction of a bill for reforming the exchequer office, which was rejected in committee. Graham's abandonment of liberal principles lost him his seat for Cumberland, but he found a refuge at Pembroke. Joining the conservatives, in 1841 he became home secretary under Sir Robert Peel. While retrograde in many matters, Graham cordially supported the free-trade policy of Sir Robert Peel. He expressed his conviction that the duty on imported corn must be abandoned, adding that "the sliding scale would neither slide nor move, and this was its condemnation." Graham supervised the measures adopted for the relief of the Irish famine, and particularly the administration of the poor law. He went out of office with Peel in 1846, and in the succeeding year was returned to the new parliament for Ripon. After the death of Peel in 1850, Graham was the leader of the small but distinguished band of Peelites, and he consistently opposed the tory efforts to restore protection. In 1852 he was elected for Carlisle, and on the formation of Lord Aberdeen's coalition ministry he returned to his old post at the admiralty. He again set himself to the task of securing administrative efficiency and economy. After the fall of the Aberdeen government Graham retained his office in the

ministry as reconstituted under Lord Palmerston, but he resigned in February 1855. Graham was haughty in demeanour, and his speeches, though sometimes brilliant, lacked spontaneity; but he was an able administrator and a model chairman of parliamentary committees.

[Torrens's *Life and Times of Sir James Graham*, 1863.—*The Times*, 26th October 1861.—*Annual Register*, 1861.] G. B. S.

GRAMONT, SCIPION DE, seigneur de Saint Germain, born in Provence during the 16th century, died, it is believed, in Venice about 1638. He was ordinary secretary of the royal closet under Louis XIII.

His *Denier Royal, traité curieux de l'Or et de l'Argent* (Paris, 1620) is dedicated to M. de Schonberg, superintendent of the finance of France, and is written to prove that "France is one of the least oppressed (*foulé*) kingdoms of the world, and that the king does not so much burden his people as the general outcry might induce people to suppose" (p. 199). His main position is that "gold and silver, which measure the price of all things, have lost much of their former price and value by the great plenty of them which we now have" (p. 72). "The price of money, although it measures the price of other things, is not itself fixed and stable, but changes, rises and falls according to its plenty or scarcity" (p. 119). "It must be admitted that within the last century more than nine hundred millions of gold and silver have passed through the gate of Spain and entered Europe, spreading as they were attracted by the labour and industry of the different nations" (p. 136). Gramont's conclusion is that if the taxes are nominally higher than in former times, they are not so really, for "as the great quantity of gold and silver . . . has lowered their price, it is necessary that the number (of coins) should compensate (their loss of) value" (p. 262).

Gramont also clearly sees that "debtors have won what their creditors have lost" (p. 125). He, however, clings to the traditional opinion that "money does not take its value from the material out of which it is made, but from its form, which is the mark of the prince, and which could bestow value on any vile and abject matter" (p. 13). This opinion, repeated p. 18, does not agree very well with the rest of his argument.

[See Cossa, *Introduction to the Study of Political Economy* (Eng. Trans., p. 175, ed. 1893).]

E. Ca.

GRAND LIVRE (Fr.). The register of the public debt of France, created under a decree of the 24th August 1793, in 229 articles, by which all the existing debts at that time were consolidated in a five per cent stock. The Great Book was to form the sole and fundamental title of the creditors of the state, and holders of scrip of all public debts—national,

provincial, or communal—were required within a given time to produce their claims, the amount of which was inscribed to their credit nominatively and alphabetically. All titles to bearer were suppressed, and the measure facilitated the confiscation of the property of the church and the *émigrés*. Art. 24 of the decree declared that the interest or *rentes* due to the churches were suppressed to the profit of the republic, which would thenceforth provide for the expenses of public worship. Art. 94 ordered the extinction of all sums due to *émigrés* after payment of claims of their creditors. The total amount of the debt consolidated was 2,556,060,000 frs. in capital, and 127,803,000 frs. in *rentes* or interest. A new *Grand Livre* was created in 1797, when two-thirds of the debt were virtually repudiated, holders receiving a fresh inscription of consolidated thirds, the other two-thirds being paid off in assignats or national bonds of fictitious value. After this operation the inscribed debt, further reduced by annulations, amounted to only 40,216,000 frs. in *rentes*. Subsequent borrowings down to the present time have necessitated the opening of other sets of books, but the formula is still retained and loan bills invariably commence with the words, "The minister of finance is authorised to enter on the *Grand Livre* a sum of *rentes* sufficient to produce a capital of," etc. (see RENTE). T. L.

GRANGERS AND GRANGER LAWS. In 1867 a national secret organisation, known as the Patrons of Husbandry, was formed in the United States. Although its membership was nominally confined to those engaged in agriculture, it grew very rapidly. A local society was called a "grange"—whence the generic term. As granges, these bodies were forbidden by their constitution to engage in political discussions, but were encouraged to advance the interests of farmers along the lines of co-operation, economies in purchases, and an increase in the diversification of crops. In the south and west the Grange movement became active, and established banks, insurance companies, co-operative stores, grain elevators, and warehouses. Although a non-political organisation, it promoted anti-monopoly legislation, particularly against railroads, with a view to lower freight-rates, thus securing as was thought, a freer market for grain. Laws fixing maxima freight and passenger rates were passed in Illinois, Iowa, and Minnesota, popularly known as Granger laws. Although subject to much criticism on the ground that they were unconstitutional, they were sustained by the United States supreme court. The Granger movement declined after 1875, and the granges have retained little influence, save in some sections as social centres in farming villages. (See FARMERS' ORGANISATIONS IN THE U.S.)

[The early history is described by C. F. Adams, Jr., in the *North American Review*, 120 (1875): 394, and the later history by C. W. Pierson, in the *Popular Science Monthly*, 32 (1887): 199, 368.]

D. R. D.

GRANT, JAMES (later part 18th century), entered the service of the East India Company in 1769, was made chief sherishtadar, keeper of records, under the board of revenue of Bengal in 1786, and in 1799 was still in the company's service. He wrote *An Inquiry into the Nature of Zemindary Tenures in the Landed Property of Bengal*, 1790, to show that zemindars were officials, not proprietors of the lands which they held, as payment for their services in collecting dues from the peasants, of the sovereign, the sole landowner. His views, though new at the time, have been accepted in the main.

Grant was an expert in local revenue questions, and wrote an *Historical and Comparative Analysis of the Finances of the Subah of Bengal*,—an *Historical Analysis of the Revenues of the Northern Circars*, and an *Historical Analysis of the Revenue of Bengal* (see Appendix to *Fifth Report of Select Committee of the House of Commons on the affairs of the East India Company*).

[Appendices to 2nd edition of *Zemindary Tenures*, 1791.—*List of the company Civil Servants, 1799*.—*Extracts from Harington's Analysis of the Bengal Regulations*.—Grenville's *British India Analysed*.—Mculloch's *Literature of Political Economy*.]

E. G. P.

GRANT, SIR ROBERT (1779-1838), son of Charles Grant the East Indian Director, was a barrister, a member of parliament in 1826, 1830, and 1831, judge advocate general in 1832, and governor of Bombay in 1834. A man of great and versatile ability, he wrote (1) *The Expediency Maintained of Continuing the System by which the Trade and Government of India are now regulated*, and (2) *A Sketch of the History of the East-Indian Company from its first Formation to the Passing of the Regulating Act of 1773*, both published in 1813; and (3) *A View of the System and Merits of the East-India College at Haileybury*, a speech published in 1826. The first of these works is an account of the company's government, and an argument adverse, on political and commercial grounds, to its abolition.

[*Gent. Mag.*, Dec. 1858 (age incorrect).—*Dict. of National Biography*.—*East India Register*, 1835, ii.—*Times*, Oct. 19 and 23, 1838.]

E. G. P.

GRAPHICAL or GRAPHIC METHOD. We have shown in the article on DIAGRAMS how a table of statistical figures may be represented by a curve.

This method of representation, which is much used by engineers and by experimental scientists generally, is now thoroughly established in statistical investigations of economic phenomena.

As was well said by Playfair, the earliest writer to employ this method systematically (who declares his indebtedness to his brother

for its conception), when publishing his first book in 1785, we may compare the clearness of expression thus obtained, as contrasted with the difficulty experienced in grasping the same facts when expressed in a table of figures, with a map of the course of a river. This method gives, as is obvious, a much clearer idea of the country traversed than would be afforded by even the most detailed schedules of the latitude and longitude of places through which it flows.

The accompanying diagram (fig. 1) which was published in the *Times* of 2nd February 1893 shows how the fall in the price of wheat during the year 1892 is represented graphically. A single glance at this curve is sufficient to enable the mind to grasp not only the general fact of a fall in price, but also the varying rapidity of that fall in different months, and the slight temporary checks in its course.

It is clear, on a very slight consideration, that no greater accuracy can be obtained in the graphic representation than is afforded by the tables of figures on which it is based, and indeed the curve is less accurate than the statistical tables, unless it be drawn both on a large scale and with great care.

In spite of this, however, it is likely to prove far more fruitful in directing the attention to the salient features of the phenomena represented than the method of tabulating the results in schedules of figures.

In considering such a curve as that which represents the changes in the price of wheat (fig. 2) during a long period of years, the suggestion is obvious that the repeated rise and fall may be due to the operation of causes varying in intensity in different years, but recurring at regular intervals.

If the intervals between successive maxima or minima were of equal length, this conclusion would be a fair one, and it might be possible to extend the curve hypothetically so as to foretell with some degree of certainty future variations.

Such regularity is not to be found in general, owing probably to the intermingling of the effects of many causes recurring in periods of different duration.

It is possible, however, to eliminate some of the fluctuations by drawing a second curve in the manner shown in fig. 2.

In this figure the heavy line shows the variation of the annual average price of wheat, while the thin line gives the six year averages of the same prices.

If there be any cause recurring at intervals of six years, and in that period producing variations of equal amount evenly distributed on either side of the average, so that its effects, if plotted out by themselves, would give a curve regularly repeated at six-yearly intervals, the process of averaging would entirely eliminate these effects, and would leave a curve showing the effects of all other causes when this one

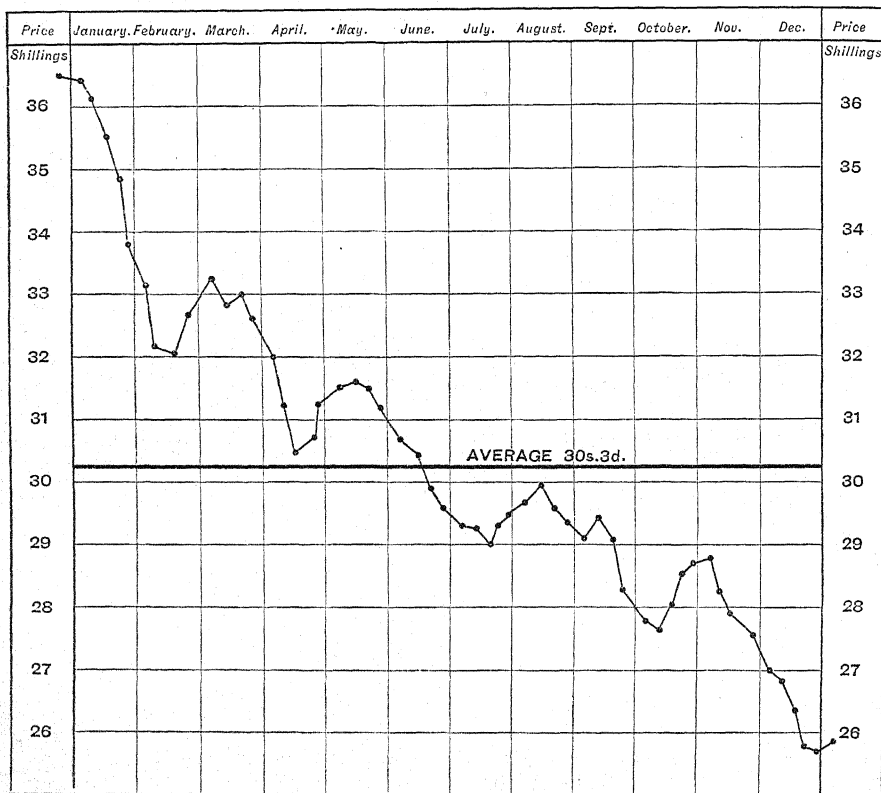


Fig. 1.—Price of wheat per quarter in 1892.

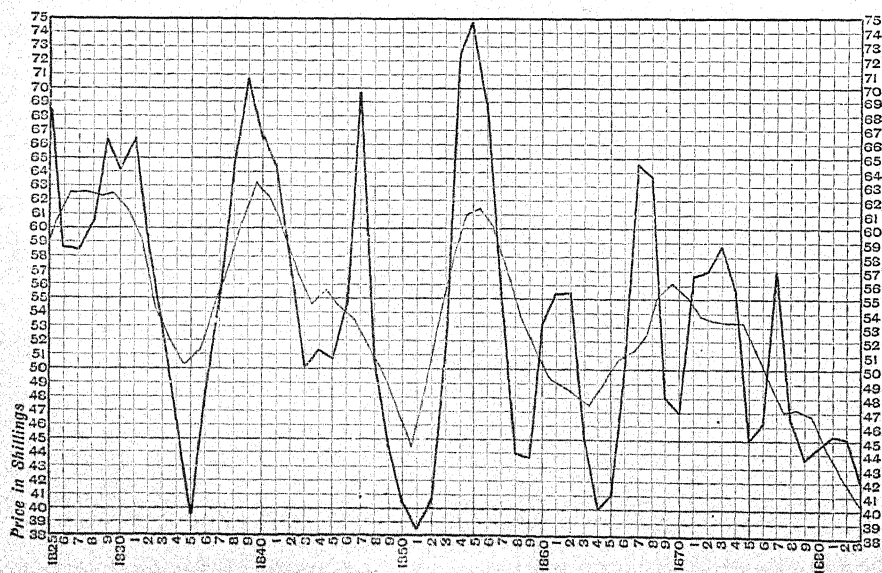


Fig. 2.—Annual and sexennial average price of wheat per quarter, 1825-83.

was omitted. Fluctuations in other periods would be represented on a reduced scale, and those, if there be any, whose period was nearly six years, would be almost completely unrepresented. A three-year or ten-year average would similarly eliminate the effects of other causes repeated at corresponding intervals.

Since the whole variation may be regarded as compounded of variations due to many periodic causes, the repeated application of this device may afford valuable information as to the nature of this complex mixture.

This subject has been carefully investigated by Prof. Poynting, whose paper on the subject in the *Statistical Society's Journal* for March 1884 is most valuable and instructive.

One obvious advantage of this smoothing process is illustrated in the above diagram, where the somewhat violent rise of price in 1847, which was not maintained, and may have been due to extraordinary causes of a temporary nature, is productive of but slight effect in the sexennial average curve, and similarly for the sudden fall in 1870, and for the rise in 1860-62.

The fluctuations of the thin curve are much less irregular than those of the thick line, and suggest a regular variation of longer period. A triennial or decennial average might afford further evidence of such a variation, which is masked in the annual average.

The comparison of two or more curves showing the variations of different phenomena, some-

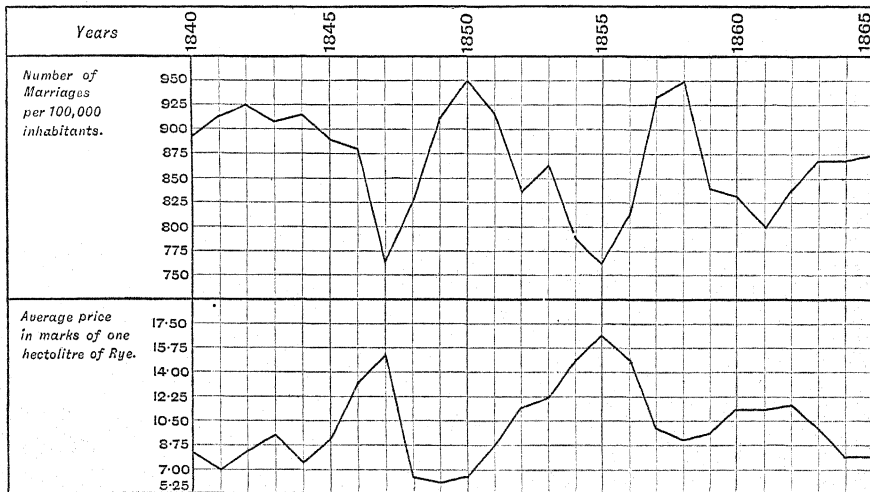


Fig. 3.—Marriage-rate and price of rye in Prussia compared, 1840-65.

times reveals a striking similarity between such variations.

Fig. 3 is a case of such comparison, which is given in Meitzen's work on statistics. In looking at the two curves side by side, it is difficult to avoid the conclusion that in Prussia, during the period 1840-65, the price of so prominent an article of food as rye, regulated in a very powerful measure the possibilities of marriage among the peasants. In other countries, and at other times, the price of food appears to have been but one among several influences of importance, and the agreement between the corresponding curves is in general less marked.

The method of comparison here illustrated has been employed by numerous investigators. Jevons's work on *Commercial Crises and Sun Spots* (in his *Investigations in Currency and Finance*) is one of those best known, and a remarkable agreement is shown between the variations of commercial prosperity and the maxima and minima of spots on the solar surface. Jevons

suggested that the terrestrial weather was affected by these sun spots, and thus, through variations in the harvest, the business world was subject to their influence. It is, perhaps, hardly possible at present either to affirm or deny the truth of the connection, and it is necessary to remark that variations in different phenomena due to entirely unconnected causes may show, for considerable periods, a marked resemblance, which resemblance may be found to entirely disappear in the further history of the facts compared.

Very interesting comparisons between the changes in the prices of wheat, cotton, and silver have also been made, regarding which it should be noticed that, assuming the variations to be similar, the conclusion may be that all are due to causes so connected as to produce effects similar in kind or degree, while, on the other hand, it may be that the variation in one has been the cause of the variations in the others.

In making comparisons between two curves

such as those just referred to, it is desirable to choose such a scale for each that the range of variation is similar in both, otherwise the correspondence may be entirely overlooked. As an example of this we may take the diagram (Fig. 4) given by Prof. Marshall in the jubilee volume of the *Journal of the Statistical Society*, comparing the consumption per head of tea and sugar in the United Kingdom for the years 1860 to 1883. The consumption of sugar is represented in pounds, while that of tea is represented in two curves in pounds and ounces respectively. The comparison of the consumption in pounds would appear to indicate a much more rapid increase in the use of sugar than in that of tea, while the close correspondence between the two rates of increase is evident on comparing the consumption of tea in ounces with that of sugar in pounds.

The method we have illustrated up to the present of representing statistical tables, though that most generally employed for economic purposes, is by no means the only one used. For representing the frequency of winds in different directions, lines may be drawn from a point of such length as to represent, on a scale

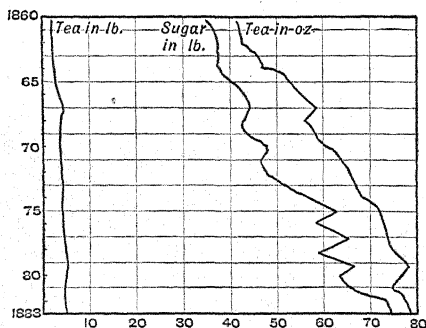


Fig. 4.—Consumption of tea and sugar per head of population in United Kingdom.

agreed on, either the frequency or the intensity of winds from that quarter. The curve which connects the extremities of these lines will express the facts required in a manner hardly possible by such curves as we have used above.

A similar mode of representation may be used to express other facts, as is illustrated in Fig. 5, which is a curve due to M. Janssens, expressing the variations in the death-rate, at Brussels, of children less than a year old and of those less than a month old.

The latter rate is represented by the small inner curve, the former by the outer one. The circle in each case expresses the average for the whole year, and where the curve falls inside it,

the rate is less than the average, while in the blackened part, outside of this circle, we have represented the death-rates in excess of the average. The mode of representing time is

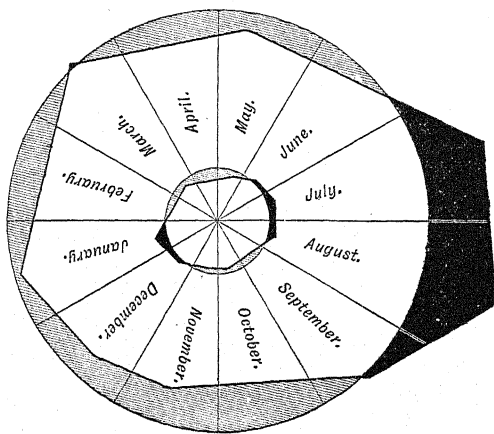


Fig. 5.—Infant mortality in Brussels.

clear from the figure, which shows that the latter part of the summer is that in which the infant mortality of Brussels is highest among children of less than one year old, while the rate exceeds the average among the very young infants both in the winter months and in the middle of summer.

It appears that this method should be especially suitable for the representation of phenomena which recur with some regularity year by year, and should enable the comparison between successive years to be made with much greater ease than is afforded by the curves of the early part of this article.

It is clear that the methods of representation referred to thus far are only adapted to display the simultaneous variations of two quantities, e.g. time and price. If it be required to represent the variations of one phenomenon with those of each of two co-existent causes, a surface is the suitable representation, rather than a curve on a plane.

The construction of such surfaces is so difficult that, in general, we are compelled to satisfy ourselves with a series of sections taken parallel to one or other of the three planes of reference.

A very ingenious attempt to represent the changes of economic phenomena, by the use of suitably-shaped figures having three dimensions in space, has recently been made by Dr. Irving Fisher called Stereograms. The description of the devices of this writer would require more space than can be given here, and the reader must be referred to the memoir entitled "Mathematical Investigations in the Theory of Value and Prices" in the *Transactions of the Connecticut Academy*, vol. ix., July 1892.

We can only say here that Dr. Fisher has devised a mechanical apparatus for showing how various prices are altered by a change in the supply of purchasing power, or by a change in the conditions of demand or supply of one of the commodities concerned.

Among modes of representing on a plane the shape of a solid figure, besides that of drawing a series of sections, we have the method of employing a graded series of tints or colours, the deepest tints corresponding to the highest parts of the surface or to its lowest parts at choice.

This method is now very commonly employed for the construction of maps. It is easy to see that a plan of a town which shows every street and house will, by the larger or smaller proportion of its surface occupied by lines indicating the presence of houses, reveal at a glance the comparative degree of crowding of dwellings in its different parts, and a reduced copy, so small as not to show the independent tenements, would still, by the variations in shading, show the varying density of population, so far as the crowding together of dwellings represents that density. The grading of tints shown by such a plan, may be employed for other purposes. Professor Ashley, for example, in his *Economic History*, vol. i. pt. ii. p. 304, employs such a map to show the localities which were more or less extensively occupied by enclosures in the 15th and 16th centuries.

It is obvious that differing tints of the same colour may be replaced by different colours, should such a mode of representation appear more desirable, the significance of each colour being indicated in the margin of the map or diagram.

Another method is to draw contour lines through those points on the plane where the surface, were it constructed, would always stand at the same height above the plane. A series of such contour lines gives a very fairly accurate representation of the shape of the surface. The lines of equal barometric pressure or of equal temperature on weather charts, or the lines where the soundings show equal depth on a chart of a sea or lake, are examples of the mode of representation here referred to.

Charts or maps which show, by any of the methods just named, the statistical variations of the physical or social phenomena of the districts represented, are known as CARTOGRAMS. A simpler though less effective method of indicating such variation, is to place the actual numbers referring to each district in the centre of the space on the map which represents it.

To the comparison of various quantities by drawing squares, circles, triangles, or other figures of such sizes as to be proportional in magnitude to the quantities to be compared, reference has already been made in the article on DIAGRAMS. In regard to these later modes of graphic representation, which are here discussed very briefly inasmuch as their theory is not a matter of difficulty, and in reference to the whole subject, the articles and books quoted may be consulted,

and also, among other writings, the articles "La Statistique Graphique," by M. Levasseur, and "On the Graphic Method of Statistics," by Prof. Marshall, in the jubilee volume of the Statistical Society;¹ also Marey, *La Méthode Graphique*. Wm. Playfair, *Lineal Arithmetic, a Real Statement of the Finances and Resources of Great Britain*, etc.,—*Lineal Arithmetic or Charts of Commerce and Revenue*.

A. W. F.

GRASLIN, LOUIS FRANÇOIS DE (1727-1790), was from 1757 *Receveur Général des Fermes* in Nantes, where he left behind him the reputation of an enlightened and zealous administrator. His name, in token of public gratitude, has been given to one of the *places* in that town.

Graslin was a steady and consistent opponent of the tenets of the PHYSIOCRATS on the subject of the PRODUIT NET (*q. v.*) and the consequences they deduced from this principle and applied to taxation. His first work, *Sur l'influence de l'impôt indirect sur les biens fonds*, was written in 1767 in answer to a prize question put, under the influence of Turgot, by the *Société Royale d'Agriculture* of Limoges; the first prize was awarded to M. de PÉRAY,—who was a follower of the physiocrats in their doctrine on the *produit net*,—and a *mention très honorable* was given to Graslin. Turgot answered by a criticism of Graslin's essay which has been reprinted in the large edition of his *Œuvres* (Paris, 1844, vol. i. p. 439).

Graslin also published his *Essai Analytique sur la Richesse et sur l'Impôt*, Londres, 1767, designed to prove two propositions: "the first, that the produce of land is wealth even when there is no *produit net*, namely when the cost of cultivation is equal to the value of the produce, and the second, that industry, which employs raw material produced by land, is wealth intrinsically, as well as land in its productive capacity" (p. 11). On the subject of taxation he writes: "Not only do the taxes which are improperly called *indirect* [meaning those which are not assessed on the rent of land] not necessarily fall on the landowners, but it is even possible that a tax directly levied on land may be indirectly paid by other contributors" (p. 230). He often quotes the example of Holland, and proclaims the superiority over real and personal taxes of taxes on consumption (p. 303), although he admits that things of first necessity ought never to be taxed (p. 310).

Graslin is by no means a despicable controversialist, but, as was observed by Dupont de Nemours (*Œuvres de Turgot*, i. p. 416, ed. 1844), he spoils his work by "a slight affecta-

¹ For a good example see *Return with Diagrams showing the Consumption, from 1861 up to the latest date, of Tea, Coffee, Cocoa, and Chicory, of Alcoholic Beverages, and of Tobacco, compared with the increase of population*, 329, Treasury, 1894. See also reference to stereogram in MARRIAGE RATE, also to diagram in MATHEMATICAL METHOD OF POLITICAL ECONOMY.

tion of metaphysics," and his language is often wanting in precision and accuracy.

As Graslin's work preceded the *Wealth of Nations* by nine years, it has been thought that he might have attended the course of lectures delivered by A. Smith in Edinburgh from 1751 to 1754. There is, however, no proof that this had been the case. The fact that his work bears *Londres* on the title-page does not even render it certain that he had ever been in London.

[*Correspondance Contradictoire entre M. Graslin, de l'Académie Économique de Saint Pétersbourg . . . et M. l'Abbé Baudeau, auteur des Ephémérides du Citoyen, sur un des Principes fondamentaux de la Doctrine des Économistes* (London, 1779).]

E. CA.

GRASWINCKEL, DIRCK, born 1600, studied law, became, 1645, "advocaat-fiscaal der grafelykheids-domeinen in Holland" (advocate-fiscal of the count's domains in Holland), died 1660 at Mechelen (Malines). Besides his political writings he gained great renown by his economical work: *Placaetboek op het stuk van de Leeftocht* (Collections of Edicts on the subject of Food), Leyden, 1651. The 1st part is merely historical, the 2nd, critical; it deals principally with (a) the question of export of corn, whether this should ever be forbidden or not. Government, he says, has a right to forbid it in periods of very high prices and famine, when every country has to take care of itself in the first place; but in other cases export ought to be free; (b) the question of forestalling. Though dealing in corn is to be permitted, forestalling should not be allowed.

His love for free trade in respect of exports does not prevent him from advocating import duties as a means of raising the price of corn. Like BOISGUILLEBERT, he looks on a high price of corn, although resulting from this cause, as a sign of national well-being. A. F. V. L.

GRATUITOUS UTILITY. Bastiat divides utilities into those which are *gratuitous* and those which are *onerous*, the former being free gifts of nature, while the latter directly or indirectly involve effort in their acquisition (see GOODS, CLASSIFICATION OF). It is assumed that whatever is gratuitous in the above sense is also common to all. This distinction leads up to Bastiat's characteristic doctrine that value is the relation of two services exchanged. Very briefly the argument is as follows. No one will give anything in exchange for that which can be obtained gratuitously by a mere act of appropriation; hence the phenomenon of exchange-value can arise only in connection with onerous utility. But the recipient of an onerous utility is saved an effort, and when an effort is saved a service is rendered. Hence any exchange of onerous utilities is in effect an exchange of services. This position that the source and measure of value are to be found entirely in the *services* which are embodied

in onerous utilities has, as Cairnes observes in his well-known essay on *Bastiat*, "the unmistakable ring of an axiom of natural justice." "*Services pour services*"—what can be more just? We have a manifest "economic harmony." Unfortunately the term *service*, as used by Bastiat, is highly ambiguous. There is throughout more or less confusion as to whether services are to be measured by the effort exerted by the man who performs the service, by the effort saved to the purchaser, or by the usefulness of the service; and this constitutes a fatal flaw in the argument. Another fundamental distinction of Bastiat's—that, namely, between value and wealth—is based upon the distinction between gratuitous and onerous utilities. Gratuitous utilities cannot from their nature possess exchange-value. They are, however, regarded by Bastiat as very important constituents of wealth. The counter theory, which identifies wealth with value, is declared by him to be the glorification of obstacles; since, if through some revolution in nature those things which are now produced with toil and sacrifice could be obtained gratuitously, they would on this view cease thereby to be wealth. This is not the place in which to discuss the question here raised, which is one of admitted difficulty, particularly in connection with the measurement of wealth (see Sidgwick, *Principles of Political Economy*, bk. i. ch. 3). It may, however, be pointed out that whatever definition of wealth be adopted, political economy has comparatively little concern with gratuitous utilities. To a great extent they do not admit of appropriation, at any rate by individuals; if appropriated, they are still not made the subject of exchange; and they are not the produce of human labour. Hence there arise no economic problems relating either to their production or their distribution. But, on the other hand, even if they are technically excluded from wealth, the economist is bound to attach importance to gratuitous utilities whether as factors in the production of onerous utilities or as rendering the production of onerous utilities needless.

[On the subject of this article, see Bastiat's *Harmonies of Political Economy*, translated by P. J. Stirling, 1860.] J. N. K.

GRAUMANN, JOHANN PHILIP (1690-1762), who in the year 1750 became master of the mint of Frederick the Great of Prussia, had formerly been a merchant in Holland, and carried into his official capacity a shrewd, business-like turn of mind. He established the Prussian monetary system, *preussisch Courant*, of coining fourteen instead of twelve thalers out of one mark of pure silver, in order to prevent the outflow of Prussian currency. In his *Versammelte Briefe von dem Gelde, Wechsel und dessen Curs, von der Proportion zwischen Gold und Silber, von dem Pari des Geldes und den Münzwesen verschiedener Völker*,

besonders von dem Englischen (Collected Letters on Money, Bills, and the rate of Exchange, the proportion between Gold and Silver, and the monetary systems of various Nations, chiefly of England), which were published in the year of his death, Graumann displays an unmitigated contempt both for "mere savants" and for "mere masters of the mint," although he uses the learned terminology of the former, even in the simplest questions, and generally has in view the aims of the latter. Graumann points out that it is not by any means a matter of indifference whether the rate of exchange is against or in favour of a nation. He finds only three faults in the English monetary system: the abolition of seigniorage, the prohibition to export English coins, and the over valuation of gold.

[See Roscher, *Gesch. der Nat. Oek. in Deutschland*, p. 420, also Dana Horton, *Sir Isaac Newton and England's Restrictive Policy towards Silver*.] E. CA.

GRAUNT, JOHN (1620-1674), statistician, was one of the earliest English writers to perceive the importance of vital statistics, and to deduce therefrom by scientific methods propositions with regard to the social and economic condition of the country. In 1662 he published a pamphlet in 4to (pp. 16 and 85) which immediately attracted much notice and commendation. It was entitled *Natural and Political Observations, mentioned in a Following Index, and made upon the Bills of Mortality*, by John Graunt, citizen of London. *With Reference to the Government, Religion, Trade, Growth, Ayre, Diseases, and the several Changes of the said City*. He tells us (see *First Ep. Ded.*) that he had "reduced several great confused volumes [of the *Bills of Mortality*] into a few perspicuous tables and abridged such observations as naturally flowed from them into a few succinct paragraphs, without any long series of multiloquious deductions." On the publication of his work, which bore on its title-page the modest epigraph: *Non me ut miretur turba, laboro, Contentus paucis lectoribus*, it was at once recognised that Graunt had opened up a new and fruitful field of investigation, and, at the king's suggestion, he was elected F.R.S. On 30th June 1665 the council of the Royal Society ordered that the book should be printed for the use of its members. Accordingly a third edition (London, 1665, 8vo) and a "fourth impression" (Oxford, 1665, 8vo) were published. Two years after Graunt's death in 1674, Sir William PETTY brought out a new and enlarged edition (London, 1676, 8vo), a fact which may perhaps in some measure account for the mistake of Evelyn, Burnet, and Stoughton, that Petty was the real author of the work. It was reprinted by Birch in 1759. Graunt especially deserves notice as one of the "beginners of an art not yet polish'd, and which time" would "bring

to more perfection" (Davenant). He also published *Observations on the advance of Excise*.

[Graunt's Life, *Dictionary of National Biography*.—The *Assurance Mag.* and *Journal of Inst. of Actuaries* contains a discussion as to the attribution of Graunt's researches to Sir W. Petty. *Vide* articles by Professor de Morgan, and Mr. W. B. Hodge; and by Mr. F. Hendriks s.v. Tontines; W. A. Bevan's "Sir W. Petty," *Am. Econ. Assoc.* 1894, review in *Econ. Journal*, March 1895.—Lord Ed. Fitzmaurice, *Life of Sir Wm. Petty*, 1895.]

W. A. S. H.

GRAY, JOHN, LL.D. (18th cent.), assistant private secretary to the Duke of Northumberland in Ireland in 1763-64, wrote *The Essential Principles of the Wealth of Nations*, etc., 1797, noticed in the *Monthly Review*; *Practical Observations on the Union*, London, 1800, 8vo; and *The Income Tax scrutinised*, London, 1802, 8vo. In the latter, called forth by Pitt's income tax, land is maintained to be the proper object of taxation, and land banks are advocated, with state development of agriculture and the fishing industry.

H. E. E.

GRAY, JOHN (19th cent.) of Galashiels and Edinburgh, author of the *Social System, a Treatise on the Principle of Exchange*, 1831 and 1842; *Remedy for the Distress of Nations*, 1842, and *Money*, 1848. His remedy for distress is a change in the monetary system, founded on the principles that production is the cause of demand and labour is the only measure of value. There is a good deal of useful suggestion with criticisms of contemporary economists and statesmen.

GRAY, SIMON (18th and 19th cents. wrote also under pseudonym of George Purves), of the war office, a writer on economics of great pretensions but of less success. He wrote in 1804 his *Happiness of States*, published 1815, including some letters of J. B. SAY (an ed. with additions, 4to, 1819), an attack on the French PHYSIOCRATS and ADAM SMITH, whom he misunderstands. It clearly fell flat, for in 1817 he published, under the assumed name of George Purves, *All Classes Productive of National Wealth*, and in 1818, under same name, *The Principles of Population and Production investigated*, the object of both being to advertise the original work, which is constantly quoted and approved. His radical fallacies are the confusion of income with wealth, of the element of price, "chargeability," with productiveness, of expenditure with employment of labour. A few of his statements may serve as examples: "Paper money is the source of new capital, equal to the whole amount in circulation"; "the working classes consume more bread when it is dear than when it is cheap"; a national debt and high taxes enrich a nation; a rapidly increasing population makes future famine unlikely. On the other hand he saw that Adam Smith did not realise the importance of consumption in his scheme of economics, and inveighed against his distinction between productive and unproductive labour.¹

¹ Later economists have endorsed Gray's opinion on this point (see Marshall, *Principles of Economics*, 2nd ed. bk. ii. ch. iii.). Had Gray been less critical and negative, his remarks might have found fuller acceptance in his own time (refer to Cunningham, *Growth of English Industry and Commerce*, ed. 1892, vol. ii. p. 439).

He also wrote *Remarks on the Production of Wealth*, in a letter to the Rev. T. R. Malthus, 1820—and, under his assumed name, *The Grazier's Ready Reckoner*.—See also Anton Menger, *Das Recht auf den vollen Arbeitsertrag* (2nd ed., 1891).—Roscher, *Pol. Econ.*, trans. Lalor, vol. ii. § 243.

E. G. P.

GREAT TITHES. See TITHES.

GREELEY, HORACE (1811-1872), was born in Amherst, New Hampshire. He was the son of a farmer of limited means; self-educated, and at an early age apprenticed as a printer, he finally settled in New York, where in 1841 he established the *Tribune*, of which he was the editor until his death. He was an important counsellor in the whig and republican parties, until dissatisfaction with the administration of President Grant led him to join a revolt and to organise the liberal republican party. By this he was nominated for president in 1871. Greeley was an ardent and consistent protectionist; and no journal did more than the *Tribune* in familiarising the north, and especially the farmer class, with this doctrine. In addition to his editorial work and frequent speeches upon the tariff, mention may be made of an *Introduction*, treating of the present state of the science of political economy and the adaptation of its principles to the condition of our own country, of *Principles of Political Economy*, by William Atkinson, New York, 1843 (Introduction, pp. i.-xv.); and of *Essays designed to elucidate the Science of Political Economy, while serving to explain and defend the Policy of Protection to Home Industry, as a System of National Co-operation for the Elevation of Labour*, Boston, 1870, pp. 384. In the latter, political economy is regarded as an art, "the chief end of a true political economy is the conversion of idlers and useless exchangers or traffickers into habitual effective producers of wealth"; "protection is another name for labour-saving through co-operation." The work is valuable as representing the views of a large part of the more intelligent agricultural population of the northern part of the United States, 1840-1870. See also in *Recollections of a Busy Life*, pp. 528-558, *The Grounds of Protection*. About 1840, Greeley came under the influence of Fourierism; and the doctrine of "association" was often referred to with favour in the *Tribune*. In 1846 occurred a discussion between Greeley and Henry J. Raymond of the *Courier and Enquirer*, running through twenty-four articles. For an abstract, see *Life of Horace Greeley*, by James Parton, New York, 1855, ch. xvi., *The Tribune and Fourierism*. In 1848-1850 Greeley wrote several articles to show how working men may become their own employers and share in profits; in 1850 he published *Hints toward Reforms*, New York, composed of eleven lectures and twenty essays, largely devoted to the emancipation of labour.

This phase of his life is referred to in *Recollections of a Busy Life*, by Horace Greeley, New York, 1868, pp. 144-158.

D. R. D.

GREENBACK. This term refers to the legal-tender notes issued by the government of the United States, and so called because the backs of the bills are printed in green ink. They are equivalent to the "legal-tenders" or the treasury notes of the civil war period, as distinguished from the new treasury notes issued under the law of 1890, based upon purchases of silver. There were three issues of greenbacks: Feb. 25, 1862, \$150,000,000; July 11, 1862, \$150,000,000; and March 3, 1863, \$150,000,000 (£80,000,000 each; £90,000,000 in all, converting the \$ at 5=£1). They were at first issued as a war measure, the government at that time being engaged in suppressing the rebellion in the southern states. Many at the time thought that the issue was unconstitutional, and none of the notes issued previous to the civil war had ever been made legal tender. The supreme court, however, has held that congress has power to impress upon the treasury notes the quality of legal tender not only in times of war but also in times of peace. At the close of the war a portion of the issue was withdrawn, but there was a strong popular opposition to the contraction of the currency, and consequently by the act of March 31, 1878, the treasury department was forbidden to reduce the amount then current in circulation, \$346,681,016.

The term "greenback" was also given to a political party which appeared in 1874, and was hostile to the national banks. It opposed the withdrawal of the greenbacks, and in part advocated the payment of the United States debt in greenbacks instead of in gold.

After the early issues the government was obliged to suspend their payment, and the greenbacks circulated at a discount until 1879. For an accurate history of the greenback issues, see *History of United States Notes*, by John Jay Knox.

D. R. D.

GREENLAND COMPANY. During the reign of James I. the whale fisheries first came into notice. After being noted as sources of considerable profit for some time, a period of decay seems to have set in, for in 1693 complaint was made of their fall from their former high position. It was urged that the only available means of revival lay in the formation of a joint-stock company. Accordingly, on 1st October 1693, Sir William Scawen and forty-one others were incorporated as a company of merchants of London trading to Greenland. Their exclusive rights were to cease after the lapse of fourteen years from the date of the incorporation. The enterprise was not a success, and no application was made for the renewal. After the failure of the company various other expedients, as, for instance,

bounties to private traders, were employed for the purpose of stimulating the whale fisheries.

[Macpherson, *Annals of Commerce*.—Cunningham, *History of Industry and Commerce*, vol. ii.]

E. C. K. G.

GREG, WILLIAM RATHBONE (1809-1881), born at Manchester, was educated at Bristol under Dr. Lant Carpenter, and at the university of Edinburgh. In 1832 he entered business, from which, however, he retired in 1850. In 1856 he was appointed one of the commissioners of customs, and in 1864 comptroller of the Stationery Office, a position which he held till 1877.

Though Greg's writings contain no positive contributions to economic knowledge, they are full of suggestive criticism and written in a frank easy style. The various subjects of which he treats are canvassed from all points of view, and the theories relative to them explained with the object of discovering the truth or rather the error which they contain. Though he did not deny the advance which had been made in general economic comfort, Greg was more acutely conscious of the difficulties in the way of sound economic and social progress. These he rather overestimates, while on the other hand he underestimates the importance of those economic influences of society which insensibly control the economic individual and modify the evils menaced by a too exclusive devotion to self-interest. His views on Malthusianism deserve mention.

Greg sometimes used the pseudonym of *Cassandra*. His chief writings relating to economic or semi-economic subjects were, *Political Problems of our Age and Country* (1870).—*Enigmas of Life* (1872).—*Rocks Ahead* (1874).—*Mistaken Aims and Attainable Ideals of the Working Classes* (1876).

E. C. K. G.

GRENIERS À SEL. These were established in France in 1342 for levying and collecting the *GABELLE* (*q.v.*), or tax upon salt. All salt manufactured in France had to be taken to the *grenier* of the province under penalty of confiscation. The *grenier* fixed the producer's price, and sold the salt at a much increased rate to the retail dealers, who were called *regrattiers*. The *grenier* was also a court of justice to decide all disputes arising in connection with the *gabelle*. In the 18th century there were seventeen *greniers à sel*, which were all abolished with the *gabelle* in 1790.

[Clamagèran, *Histoire de l'Impôt en France*.]

R. L.

GRENIERS D'ABONDANCE (France). At all periods of French history it has been the custom to create reserves of the surplus production of corn in years of abundance to meet the deficit in years of scarcity. Such stores were usually formed by the religious communities, but in 1577 a royal ordinance enjoined the local authorities to establish public granaries (*greniers d'abondance*) to hold a minimum of

three months' consumption, and authorised them to borrow money at interest for the purpose. No records exist, however, of the extent to which the measure was carried out. Under Louis XV. difficulties appear to have arisen in ensuring a regular supply of bread to the capital, for the government then purchased the great mills and storehouses at Corbeil near Paris to hold a permanent reserve of 25,000 sacks of flour. During the revolutionary period the government had again to intervene in the food supply of Paris by the purchase of 1200 to 1500 sacks of flour daily, which were sold to the bakers at 10 to 15 per cent below their cost price. One effect of that measure was that merchants ceased entirely to send corn to the market, and the bakers became wholly dependent on the government for their supplies; another consequence was that the inhabitants of the region around the capital flocked to Paris to purchase bread. Stringent measures were adopted against the intruders, but bread was nevertheless sold to them secretly, and the consumption in Paris rose from 1500 to 1900 sacks of flour daily. A first step was taken to compel citizens to obtain a card without which bread would not be delivered to them, and this was followed by a decree fixing rations according to the number of the family. M. Thiers describes in his *History of the French Revolution* the scene at the bakeries at the time. A long rope was stretched out from the door to be held by the hand by the people as they waited for their turn; the women would sometimes cut the cord and there was then a rush and a struggle, and armed force had to be called in to restore order. Various other measures were adopted as the necessity for them arose. In 1793 the National Convention ordered the creation of public granaries in each district of Paris, and voted a sum of 100,000,000 livres to stock them. In 1807 Napoleon I. commenced the construction of the immense range of buildings called the *grenier d'abondance* on the south bank of the river at the eastern end of Paris. It covered a space of two acres, and was intended to be six stories high, with mills worked by water power from the Seine in the basement. This magazine was to contain a three months' supply of 180,000 sacks of flour, constantly renewed. The service was, however, never organised, nor was the building ever terminated. Lofts were raised over the ground floor and roofed in, and the whole served for a long time as a warehouse for the stores the bakers were bound to keep as a condition of their privileges, the trade having become a monopoly with the number of shops limited in proportion to the number of inhabitants. The building was burnt during the fighting in Paris on the suppression of the commune, and was not rebuilt. The use for it had ceased, as the trade had been made free in 1863, and all the

regulations relating to the compulsory reserves abolished. That the magazine was wilfully destroyed was proved by a document afterwards found in one of the mairies, in which the colonel of one of the insurgent legions reports, "I have set fire to the *grenier d'abondance*." All that now remains of the former restraints on freedom of trade in food supplies are Art. 420 of the Penal Code, which punishes by two months' to two years' imprisonment, and fines of from one to twenty thousand francs, all manœuvres or coalitions to raise or reduce the prices of corn, flour, or bread; and Art. 30 of the Municipal Law of 1791, which empowers the mayors of communes to fix the prices of bread and meat, while, however, expressly forbidding the regulation of the price of corn or cattle. This law is still applied in many localities, and attempts to revive it at Marseilles in 1893, and more recently at St. Denis, led to strikes of the bakers, who closed their shops for several days rather than submit to it.

T. L.

GRENVILLE, GEORGE (1712-1770), was the son of Richard Grenville of Wotton, and his wife Hester, Countess Temple. He was educated at Eton and Christchurch, Oxford, and trained for the bar. Forsaking the law for politics, he was elected M.P. for Buckingham in 1741, and continued to represent that constituency until his death. After holding minor appointments, in 1754 he became treasurer of the navy. In this capacity he effected a useful reform by passing the Navy Bill, which provided for the speedy and punctual payment of seamen's wages. In May 1762 Grenville was appointed secretary of state; he already held the leadership of the House of Commons. Five months later, however, he was compelled to resign the leadership and the seals, and accepted the post of first lord of the admiralty. He supported Dashwood's unpopular cider tax, on the ground that the profusion with which the late war had been carried on necessitated the imposition of fresh taxes. Grenville became first lord of the treasury and chancellor of the exchequer in April 1763. His fiscal policy precipitated the disastrous war with America, while he lost popularity by the prosecution of John Wilkes. When the famous "No. 45" of the *North Briton* appeared, he caused Wilkes to be arrested under a general warrant. The constitutional struggle which ensued involved ministers in an expenditure of £100,000, besides bringing upon them much odium. In the session of 1764 Grenville brought forward a series of resolutions asserting the right of the imperial legislature to impose taxation on the colonies. The proceeds of these duties were to be paid into the imperial exchequer, and to be applied under the direction of parliament "towards defraying the necessary expenses of defending, protecting, and securing the British colonies and plantations." The Commons also resolved that "it may be proper

to charge certain stamp duties" in America. Grenville allowed a year to elapse before embodying the resolutions in a bill; but in 1765, in spite of the unanimous protests of the American colonies, the Stamp Act was carried, imposing customs duties upon the importation into the colonies of various foreign products. The act excited such discontent in America that the matter was again forced upon the attention of parliament in 1766. Pitt, in one of his most brilliant speeches, insisted that taxation without representation was illegal, but while he urged the immediate repeal of the tax, he proposed to uphold the dignity of the mother country by asserting the general legislative authority of parliament over the colonies. Grenville defended his ill-fated measure with vigour, but in the end the Stamp Act was repealed, while several of the obnoxious duties imposed in 1764 were withdrawn, and others modified. As Grenville had blundered over the Regency Bill, and was generally distasteful to the king, he was dismissed from the premiership in July 1765. Townshend, the chancellor of the exchequer, having proposed in 1767 to continue the land-tax for one year at 4s. in the £, Grenville carried a motion reducing the tax to 3s., by which the budget sustained a loss of £500,000. It is stated that this was the first occasion since the revolution on which a minister had been defeated upon any financial measure. As the result of his study of economical questions, Grenville wrote in conjunction with William Knox a treatise on *The Present State of the Nation; particularly with respect to its Trade, Finances, etc. etc., addressed to the King and both Houses of Parliament* (1768). This pamphlet was noticed by A. Smith, *Wealth of Nations*, bk. iv. ch. i., and drew a reply from Burke. Grenville had taken a leading part in the early measures against Wilkes, but being convinced of the futility of a struggle between the House and the electors of Middlesex, he opposed his expulsion from the House of Commons in 1769, in a speech which was the most effective delivered in favour of the constitutional rights of electors. To remedy the evils connected with the trial of election petitions, early in 1770 Grenville introduced his celebrated measure, known as the Grenville Act, which forms "a landmark in parliamentary history" (May's *Constitutional History*). This admirable reforming measure transferred the trial of election petitions from the House at large to a select committee, empowered to examine witnesses upon oath. The act was in the outset passed for one year only, but it was renewed from time to time, and made perpetual in 1774. This act is now repealed, and election petitions referred to judges who report to the house. Grenville attended parliament through the session of 1770, but died on the 20th of November in that year. He was a

capable statesman, had a thorough knowledge of the constitution, and exhibited much financial ability; but he was stern in manner, extremely obstinate, destitute of tact, and governed by a boundless ambition.

[*Parliamentary History*.—*Grenville Papers*.—Walpole's *Memoirs*.—The *Histories* of Stanhope Lecky, and May (Lord Farnborough).—M'Culloch, *Literature of Pol. Econ.*] G. B. S.

GRENVILLE, WILLIAM WYNDHAM, BARON GRENVILLE (1759-1834) was the youngest son of George Grenville by his wife Elizabeth, daughter of Sir William Wyndham, Bart. He was educated at Eton and Christ Church, Oxford. Elected M.P. for Buckingham in 1782, in the ensuing year he accompanied his brother Earl Temple to Ireland, as private secretary. Appointed paymaster-general in December 1783, he now gave his cousin Pitt valuable aid in the House of Commons. He devoted himself to the study of financial and commercial questions, was made one of the commissioners of the newly-created board of control, and in September 1786 vice-president of the committee of trade. For a few months of 1789 Grenville filled the position of speaker, resigning the office to become home secretary. In March 1790 he became president of the board of control, and in the following November was created Baron Grenville. He had the conduct of the government business in the House of Lords. He was appointed foreign secretary in 1791, in which office he continued for ten years, resigning his seat at the board of control in 1793. Grenville thoroughly carried out Pitt's foreign policy, and rejected all the overtures of the revolutionary government of France. In 1792 he introduced the Alien Act for the registration and supervision of all foreigners in the country, and in 1795 the Treasonable Practices Act and the Seditious Meetings Act. In 1799 he moved the resolutions for the Union with Ireland in a speech occupying four hours, "putting the arguments on strong grounds of detailed political necessity" (Lord Colchester's *Diary*). With regard to his position as a political economist he wrote a letter to Pitt in October 1800, protesting against tampering with the laws of supply and demand, and reminding him that "we in truth formed our opinions on the subject together, and I was not more convinced than you were of the soundness of Adam Smith's principles of political economy till Lord Liverpool lured you from our arms into all the mazes of the old system" (Stanhope's *Life of Pitt*). Grenville was a warm supporter of the Roman Catholic claims, and having drawn up an emancipation scheme which was rejected by the king, he resigned with several other members of the cabinet (February 1801). On the downfall of Addington in 1804, Grenville formed with Fox the Ministry of "All the Talents." In 1807 Grenville carried an act for the abolition of the slave trade, and it received

the royal assent the very day ministers went out of office on the Roman Catholic question (25th March 1807). As auditor of the exchequer Grenville refused to issue public money during the incapacity of George III. Parliament was appealed to, and both Houses passed a resolution authorising and commanding the auditor and officers of the exchequer to pay obedience to treasury warrants for the issue of such sums as had been appropriated for the services of the army and navy, as well as money issuable under a vote of credit for £3,000,000. The money was paid, but a protest was entered in the Lords' journals, signed by twenty-one peers, affirming the measure to be unconstitutional, and one that might have been avoided, without injury to the public service, by an address to the Prince of Wales. Grenville strongly opposed the Corn Importation Bill of 1815, and with nine other peers signed a protest drawn up by himself and Lord Wellesley, declaring their opinion that "public prosperity is best promoted by leaving uncontrolled the free currents of national industry" (see Rogers's *Protests of the Lords* and M'Culloch's ed. *Wealth of Nations*, 1853, p. 523, for the protest). Grenville resisted various overtures to take office, as his high sense of honour prevented him from doing so except in a cabinet pledged to deal with Roman Catholic emancipation. His last speech in the House of Lords (21st June 1822) was in support of the Duke of Portland's Roman Catholic Peers Relief Bill. In 1828 Grenville wrote an *Essay on the supposed advantages of a Sinking Fund*, of which only the first part was printed, and privately issued. Grenville died at Dropmore in Buckinghamshire, on 12th January 1834. As a statesman he was distinguished for industry, honesty, and an unusual capacity for business; and as a speaker he was weighty, lucid, and argumentative.

[*Parliamentary Debates*.—The various *Memoirs* of George III. and George IV.—Sir G. C. Lewis's *Administrations of Great Britain*, 1783-1830.—Lord Colchester's *Diary*.—Yonge's *Life of Lord Liverpool*.—Brougham's *Statesmen of George III.*] G. B. S.

GRESHAM, SIR THOMAS, c. 1519-1579, was the second son of Sir Richard Gresham, merchant; he was educated at Gonville Hall, Cambridge, apprenticed to his uncle Sir John Gresham, also a merchant, and admitted a member of the Mercers' company in 1543. In 1551 or 1552 he became royal agent or king's factor at Antwerp, in which post he received twenty shillings a day, and which he retained with few intervals during three reigns until 1574, employed in spite of his Protestant views even by Mary. His business was to negotiate royal loans with Flemish merchants, to buy arms and military stores, and to smuggle into England as much bullion as possible. He succeeded in raising the rate of exchange from

16s. to 22s. in the £, and is said to have saved in this way 100,000 marks to the crown and 300,000 to the nation. His operations greatly benefited English trade and credit, though the government could not be induced to pay its debts as punctually as Gresham would have liked. He did not hesitate to remonstrate with and advise Elizabeth and Cecil; but he was so useful and trustworthy that he was never seriously out of favour, except just after Mary's accession. On Mary's death he advised Elizabeth to restore the base money, to contract little foreign debt, and to keep up her credit, especially with English merchants. Later he taught her how to make use of these English merchants when political troubles in the Netherlands curtailed her foreign resources; at his suggestion the Merchant Adventurers and Staplers were forced by detention of their fleets to advance money to the state; but as they obtained interest at 12 per cent instead of the legal maximum of 10, and the interest no longer went abroad, the transaction proved advantageous to all parties and increased Gresham's favour. His journeys to and from Antwerp were very frequent, but in his later years he entrusted most of his public work to his agent, and is not known to have been at Antwerp after 1567. In 1554 he was sent to Spain to procure bullion, a very difficult task in which he was only partially successful; and in 1559 he was employed as ambassador to the Duchess of Parma, regent of the Netherlands; it was on this occasion that he was knighted.

In addition to his public services he continued throughout his life to do the work of "the greatest merchant in London." He was, in the language of the day, a banker and goldsmith, with a shop in Lombard Street, as well as a mercer; but he was a considerable country gentleman besides, with estates, chiefly in Norfolk, where his father held considerable property (see Blomefield, *Norfolk*), and with several country houses besides the house in Bishopsgate which he built and bequeathed to London as Gresham College. He twice entertained Queen Elizabeth as his guest. His wealth was mainly earned by his private business, but he cannot be acquitted of enriching himself at the public expense by at least one dishonourable manoeuvre; and he habitually forwarded his schemes by bribery. The money so gained he applied to public uses, his only son having died young: the foundation of the royal exchange, of Gresham College, and of eight almshouses, and the establishment of the earliest English paper-mills on his estate at Osterley, show the breadth of his interests, his liberality, his charity, his culture, and his commercial enterprise (see EXCHANGE and BOURSE; GRESHAM'S LAW).

[Burgon, *Life and Times of Sir Thomas*

Gresham.—*Dictionary of National Biography*.—Fuller's *Worthies*, Norfolk, p. 259.—Holinshed, 1808, iv. 426.—Hall, *Society in the Elizabethan Age*, ch. v. and appendix, for financial character and position.—Fox Bourne, *English Merchants*.—Will of Sir Th. Gresham.] E. C. P.

GRESHAM'S LAW. This familiar term was introduced by MacLeod in 1858 (*Elements of Political Economy*), and has since been generally accepted by economists.

It denotes that well-ascertained principle of currency which is forcibly though not quite adequately expressed in the dictum—"bad money drives out good." It has also not infrequently been explained by the statement that where two media of exchange come into circulation together the more valuable will tend to disappear. The principle in its broadest form may be stated as follows:—Where by legal enactment a government assigns the same nominal value to two or more forms of circulatory medium whose intrinsic values differ, payments will always, as far as possible, be made in that medium of which the cost of production is least, and the more valuable medium will tend to disappear from circulation; in the case where the combined amount in circulation is not sufficient to satisfy the demand for currency, the more valuable medium will simply run to a premium.

This is a principle which obviously has its roots in the ordinary instincts of commercial life, and the cases in which it has asserted itself may be divided into those where (1) of two media intrinsically good, one is by error undervalued; where (2) it is sought to keep a debased metallic currency in circulation on a par with that of a better metal; where (3) an inconvertible paper has been made to run by the side of a metallic currency. The reference to paper suggests the observation that the circulation of convertible paper side by side with, and as "the shadow of" gold, is explained by reference to a different principle.

The dictum above quoted appears to have been used first in the proclamation of 1560 respecting the decimal of the base silver coin; and we know that Sir Thomas Gresham took a prominent part in advising Queen Elizabeth and Cecil on the reform of the currency. (See Burgon's *Life and Times of Sir Thomas Gresham*.) We do not, however, find the principle stated in his own handwriting.

The actual instances of the operation of the law are numerous, and we shall cite only a few. MacLeod quotes Aristophanes, *Frogs*, as the earliest instance of its recognition. Amongst many in the history of the United Kingdom, besides the prevalence of debased silver which formed the occasion of Gresham's dictum, we may cite the following from Lord Liverpool, referring to the over-valuation of silver prior to the reign of James I.

"It is certain that the rise in the value of

Gold made by James I. in the 2nd and 3rd year of his reign was rendered necessary by the exportation of the Gold Coin, which had for some time been experienced, and by the very small quantity of it that was then left in circulation. This rise . . . produced a partial and temporary relief . . . but [Stowe] confesses that this plenty of Gold coin did not continue in circulation for any length of time, and that it afterwards began to be exported. It soon became evident that the last-mentioned rise of the value of Gold in the Coins of this Kingdom was not sufficient to make it equal to the relative value of Gold to Silver at the market."

In Mr. Chalmers's recent work on the *History of Colonial Currency*, we have without difficulty noted eighteen instances, and there are many more. In a pamphlet of 1740 on the *Currencies of the British Plantations in America*, we have the following:—"In sundry of our Colonies were enacted laws against passing of light Pieces of Eight. These laws not being put into execution, heavy and light Pieces of Eight passed promiscuously; and, as it always happens, a bad currency drove away the good currency; heavy Pieces of Eight were shipped off." And on this Mr. Chalmers comments as follows:—"Imitating the practices familiar to them in England, dishonest persons traded on the desire of the young communities for a metallic currency, by circulating clipped money at the full rate; and this malpractice was condoned by the Colonies when it was found that the light money was more apt to stay with them than 'broad' pieces." So that throughout the 17th and 18th centuries in the American and West Indian colonies we constantly find a debased currency in possession of the field. Again, when the Treasury tried to introduce sterling into the colonies in 1838, and wrongly valued the dollar for concurrent circulation with the shilling, "by a familiar law, the over-rating of the dollar sufficed to drive out the shillings" which had been shipped from Great Britain.

In the case of the United States we have excellent instances both in the effect of the legislation of 1837 as driving out silver dollars, and in the way in which the inconvertible "greenbacks" formed the chief part of the currency from 1864 to 1879.

[*Elements of Political Economy*, H. D. MacLeod, London, 8vo, 1858, p. 477.—Bi-metallism, id. *ibid.*, 1893. Essay by Dr. Giffen in *Economic Journal*, vol. i. p. 304, explaining common misinterpretation of Gresham's Law.] C. A. H.

GRIFFITH'S VALUATION is the name popularly given to the government valuation of Ireland from Sir R. Griffith under whose directions it was carried out. The first act, passed in 1826 (7 Geo. IV. c. 62), laid down a scale of prices as a basis for valuation, which was by townlands.¹ Subsequent measures, partly

¹ The smallest local division. There were 60,644 townlands in Ireland in 1881.

necessitated by the introduction of the poor law in 1838, amended the original system, but the existing valuation, commencing with Munster in 1848 and ending with Armagh in 1865, was at first carried out under an act of 1846 (9 & 10 Vict. c. 110), and later on under one of 1852 (15 & 16 Vict. c. 63), which last revised the very low scale of prices fixed in 1826 and hitherto retained. The authority of Griffith's valuation—at one time highly esteemed—is now completely discredited not only as a guide for fixing rents, which it was not intended to be, but even as a standard for taxation. The prices assumed by it are not those now existing; no adequate account is taken of the yield of land, and the different bases of the acts of 1846 and 1852 make the valuation unfair as between the localities affected.

[For origin of system see Seebohm, *Village Comm.*, ch. vii.] C. F. E.

GRIST TAX. See MACINATO.

GROAT. See FOURPENCE.

GROSCHEN (COIN). In German countries the word groschen was originally applied to any large or thick coin. Record exists of gold groschen having been coined as early as the year 1232. The name was, however, more commonly applied to silver coins. The value of the silver groschen varied considerably, as, in addition to there being several kinds of these coins, the weight and fineness of each particular kind was not constant. Their history, in fact, presents a record of more or less continuous debasement, similar to that so frequently met with in tracing the life of coins which have been in use for centuries (*e.g.* crown, denier, groat, livre, penny). The greed or the pecuniary difficulties of successive rulers led to the lowering of the coins either in weight or fineness, until a coin which was, as already mentioned, at one time made of gold, ended its career as one of the smallest silver coins of Germany, with a value of only $\frac{1}{30}$ th of a thaler (or approximately $\frac{1}{14}$ th of a penny).

No indication of the nominal value of groschen is to be found on the older coins, though it is generally placed on the more modern pieces.

Silver groschen are not now struck. The following list, however, gives the particulars of those in use in Prussia, Saxony, and Austria during comparatively recent years.

PRUSSIA.

(Under the Law of 30th September 1821.)

Silver Coin.	Weight (grammes).	Millesimal Fineness.	Value in German Marks.
Groschen ($\frac{1}{30}$ thaler) .	2.1924	222.222	0.0877
Half-groschen ($\frac{1}{60}$ thaler) .	1.0962	222.222	0.0438

(Under the Law of 4th May 1857.)

Silver Coin.	Weight (grammes).	Millesimal Fineness.	Value in German Marks.
Groschen ($\frac{1}{30}$ thaler) . . .	2.1959	220	0.0870
Half-groschen ($\frac{1}{60}$ thaler) . . .	1.0979	220	0.0435

On the introduction in 1873, under the act of the 9th July of that year, of the imperial German coinage, with the gold mark as the standard of value, the coinage of groschen was discontinued. The new law, however, provided for the coinage of nickel pieces of the nominal value of 10 pfennige (0.1 mark), and these coins, which have taken the place of the old silver pieces, are commonly spoken of as groschen.

SAXONY.

(Under the Law of 20th July 1840.)

Silver Coin.	Weight (grammes).	Millesimal Fineness.	Value in German Marks.
Two new groschen ($\frac{1}{15}$ thaler) . . .	3.1181	312.500	0.1754
New groschen ($\frac{1}{30}$ thaler) . . .	2.1260	229.167	0.0877
Half new groschen ($\frac{1}{60}$ thaler) . . .	1.0630	229.167	0.0438

(Under the Law of the 19th May 1857.)

Silver Coin.	Weight (grammes).	Millesimal Fineness.	Value in German Marks.
Two new groschen ($\frac{1}{15}$ thaler) . . .	3.2206	300	0.1739
New groschen ($\frac{1}{30}$ thaler) . . .	2.1004	230	0.0870
Half new groschen ¹ ($\frac{1}{60}$ thaler) . . .	1.0502	230	0.0435

Prior to 1840 the groschen represented $\frac{1}{30}$ th of a thaler. The coin weighed 1.9856 grammes, and was composed of silver of the millesimal fineness of 368. Its value in modern German marks is equal to 0.1315 mark.

AUSTRIA.

(Under the Convention of 21st September 1753.)

Silver Coin.	Weight (grammes).	Millesimal Fineness.	Value in German Marks.
Kaisergroschen, or 3-kreutzer piece	170.10	343.750	0.1053

No provision was made in the currency law of 29th April 1852 for the coinage of silver groschen; the smallest Austrian silver coin issued under that law being a ten-kreutzer piece.

¹ The coinage of these pieces was discontinued in 1861, when their place was taken by the copper 5-pfennige piece.

[Friedrich Noback, *Münz, Mass, und Gewichtsbuch*, Leipzig, 1879.—*Groschen-Cabinet*, Leipzig, 1749.] F. E. A.

GROSS AND NET. The word "gross" has sometimes been used by economists as a synonym of "total" or "aggregate." J. S. Mill, for instance, often means by "gross produce" total or aggregate produce as opposed to average or *per capita* produce (see, e.g., *Principles*, I. xiii. § 2 *ad fin.*), and by "gross profit" the absolute amount of profits as opposed to the rate of profit (e.g., *Essays on some Unsettled Questions*, etc., p. 92; *Principles*, iv. iii. § 3). Generally, however, "gross" has been used as a correlative of "net"—the net profits, rent, and produce being what is left of the gross profits, rent, and produce after certain deductions have been made. In the case of profits the terms are not properly applicable, since profits are themselves net receipts, *i.e.*, what is left of the gross receipts after all the cost of obtaining them has been deducted. Consequently the term "gross profits" has never attained any precise sense; it must be variously interpreted according to the context in which it appears. "Gross rent" is the amount of rent paid to the landlord by the tenant, and net rent is the amount left to the landlord after he has paid all expenses of management and repairs (*Wealth of Nations*, II. ii.); "rent" alone usually means in economic works the net rent, while in statistics it means the gross rent. As to the proper application of the terms gross and net produce there was formerly considerable difference of opinion. The PHYSIOCRATS (*q.v.*) held that rent was the only net produce of a country, and looked on profits and wages as merely a part of the necessary expenses of obtaining this net produce. Adam Smith defined "gross revenue" as the whole annual produce, and "net revenue" as what remains of this after deducting the expense of maintaining fixed and circulating capital; by this definition "net revenue" is made to include the whole of profits, wages, and rent. But Ricardo in his *Principles*, ch. xxvi. "on gross and net revenue," excluded wages from net revenue, apparently on the ground that they consist entirely of necessities, so that no contributions to the state nor additions to capital can be made from them. James Mill (*Elements*, ch. iv. § 1) adopted the same view in spite of a protest by Malthus (*Political Economy*, 1st ed. pp. 423-425) against it. J. S. Mill (*Essays*, pp. 88, 89) calls it the usual doctrine, and suggests that it should be amended by including in the "net produce" so much of wages as is over and above the smallest amount necessary for maintaining the existing number of workers. Later writers seldom use the terms gross and net produce or revenue, but treat the unqualified "produce" and "revenue" as equivalent to Adam Smith's net revenue.

E. C.

GROTIUS, Hugo (Huig van Groot, 1583-

1645), was born at Delft; at the age of eleven he became a student of the university of Leyden, and early distinguished himself as a classical scholar. At fifteen he entered public life, accompanying an embassy to the French court. On his return he practised law, and was made advocate-general of the Fisco for the provinces of Holland and Zeeland in 1607, and pensionary of Rotterdam in 1613. In the religious and political disputes of his country, Grotius supported the party of the "Remonstrants," the party of Arminianism and toleration in religion, and of oligarchic republicanism in politics. In 1618 he was arrested along with J. van Olden Barnevelt, the leader of the Remonstrants, and while the latter was put to death, Grotius was sentenced to imprisonment in a fortress for life. Escaping by the stratagem of his wife, who had him carried out in a chest supposed to contain his books and dirty linen, he crossed the frontier in disguise and made his way to Paris in 1621. He received a pension, nominally at least, of 3000 livres from the King Louis XIII. In 1634 he was appointed Swedish ambassador at the French court. In 1645 he resigned this post and retired to Stockholm; but dissatisfied with life there, he crossed over to Germany and died at Rostock in the same year. Grotius was distinguished as an historian, a scholar, an elegant writer of Latin verse, and a tolerant theologian who sought to reconcile Catholic and Protestant, and wrote commentaries on the Scriptures in the spirit of scholarship rather than of dogmatic theology. His *De Veritate Christianæ Religionis* was published in 1627; his *Annotationes* on the Old and New Testaments between 1641 and 1646. But his greatest fame was won in jurisprudence. Already in 1604 he had written a book *De Jure Prædæ*, which he did not publish, the MS. of which was only discovered in 1868. This work was suggested by his practical experience: he had had to argue for the lawfulness of the capture of a Portuguese galleon by the Dutch East India Company. The short treatise called *Mare Liberum* (printed in 1609) was a chapter of this work: against the Portuguese claim to the eastern waters, he asserted that the ocean was free to all. When disputes about the control of the sea arose afterwards between the Dutch and the English, Selden wrote his *Mare Clausum* (published in 1635) in answer to Grotius. The *De Jure Prædæ* was the germ out of which grew the *De Jure Belli et Pacis*, published at Paris in 1625. Grotius himself tells us that the license which he saw prevailing throughout the Christian world both in the making and in the carrying on of war—it was the time of the Thirty Years' War—was the motive which induced him to undertake his great work (*De Jure Belli*, Proleg. 3, § 28). Parts of the subject he admits had previously been treated of by some of the schoolmen, and by more recent theologians

and lawyers; but his chief predecessors were, as he says, Albericus Gentilis (*De Jure Belli*, 1589), and Balthazar Ayala (*De Jure et Officiis Bellicis*, 1597). But Grotius may be said to have practically created a new science, "the law of nature and of nations," which in his own lifetime became a subject of academic teaching, and to have written a book on this subject which has attained greater fame than any that has been written on it since. BENTHAM, who attacked the idea of a law of nature, introduced for the law of nations the term "INTERNATIONAL LAW" (*q.v.*). Throughout the 17th and 18th centuries the treatise of Grotius exercised an enormous influence on ethical and legal thought. It came to be less studied only when many of its main principles had been accepted by the more civilised nations, and when the sometimes irrelevant erudition and elaborate citations from ancient authors, which were the fashion of the early 17th century, made it distasteful to a later age. Grotius himself defended his use of the testimonies of philosophers and historians on the ground that they supply evidence of that consent of mankind to which writers on the *jus naturæ* and *jus gentium* were in the habit of appealing; he admits that his quotations from poets and orators are introduced rather for purposes of ornament. Grotius, while professedly basing his theories on reason and on fact, has still much of the scholastic reverence for authorities—Aristotle, the Bible, the Fathers, the Roman Jurists, the schoolmen themselves; though he has departed from the scholastic minuteness of argumentation and is saturated with the "classical" learning of the Renaissance. It may be said of Grotius and of his less literary follower Pufendorf that for the Protestant countries of Europe they took the place which the great schoolmen from AQUINAS to SUAREZ occupied in the Roman Catholic world. When the inevitable reaction against the authority of the name of Grotius began, his critics, such as PALEY and DUGALD STEWART, forgot that Grotius did not profess to write a complete treatise on ethics and jurisprudence, and that he expressly disclaimed treating the subject of politics. His professed subject is what his title indicates: and the order of the words in the title is also significant,—the phrase, it may be noted, is incidentally used in a passage Grotius quotes from CICERO. But it is only the last part of his third book and the last few chapters of his second that deal strictly with the subjects of international law, *i.e.* with the principles regulating the intercourse of nations in war and in peace. The rest of the work is all intended to lead up to this subject. In bk. i. he treats of the origin of rights and laws in general, discusses the question raised by some Christian writers whether any war is just, deciding that some wars are not contrary to the law of nature or

even to the positive divine law. In order to distinguish between public and private war he explains the nature of sovereignty with its different forms and degrees. He then goes on to consider the duty of subjects to superiors, denying the doctrine that the people is everywhere sovereign and that everywhere subjects may be justified in rebelling (see ALTHUSIUS). Grotius qualifies his precept of non-resistance only in cases where the rulers have by the constitution a limited power, or where a legally absolute ruler uses extreme cruelty or practically abdicates (see HOBBS). In bk. ii., in order to discuss all the causes from which war may arise, he examines what things are common, what are property, what is the right of persons over persons, what obligations arise from ownership, what are the rules of royal succession, what rights are obtained by pact or contract, what is the force and interpretation of treaties and of oaths, what is due for damage done, what is the sacredness of ambassadors, the right of burying the dead, and the nature of punishments. Bk. iii. "has for its subject, first, what is lawful in war: and when it has drawn a distinction between what is done with impunity and may even in dealing with foreigners be defended as consistent with justice (*jus externum*) and that which is really free from fault (is in accordance with *jus internum*), it then comes to treat of the kinds of peace and convention in war." It will be obvious even from this brief enumeration of contents, adapted from Grotius's own summary (Proleg. 4, §§ 33-35), that though recognising the distinctions, Grotius has not separated law from ethics nor public from private law.

Of economic questions he does not directly treat. His interest for the economist, apart from his reference to such questions as property, usury, etc., comes mainly from the direct and indirect effect of his conception of the law of nature (see *JUS NATURALE*). In his use of the term *jus gentium*, Grotius combined the original Roman meaning of it, the customs and principles of right common to different political societies, with a use of the term which was not Roman, as=*jus inter gentes*, the usages recognised as right between independent political societies as quasi-persons,—a confusion of meanings theoretically very misleading, but practically beneficial, since it enabled Grotius to read into questions of international intercourse the humane principles of the Roman *jus gentium* as modified by philosophical ideas about a law of nature.

Grotius, influenced partly by the biblical narrative, partly by classical traditions, and partly by what he had heard of the simple life of barbarous races—such as "certain peoples of America,"—imagined a primitive state in which everything was common. Departure from primitive simplicity and innocence and the growth

of agriculture and other arts made private property necessary. It originated by a certain pact, either express, as by division, or tacit, as by occupation (ii. 2, § 2). "Original acquisition might of old, when the human race could meet together, be made by division: nowadays it is only made by occupation" (ii. 3, § 1). Thus for all practical purposes Grotius follows the Roman jurists in basing the right of property on occupation. The suggestion of the jurist Paulus that property may also arise from the making of new things—an anticipation of LOCKE (*q.v.*), who bases property on labour—Grotius puts aside on the ground that "making" presupposes either previous ownership of the material, or acquisition of it by occupation: otherwise what we make is not ours (ii. 3, § 3). With regard to the ocean, the reason why communism was given up does not exist: it is great enough to suffice for all people (ii. 2, § 3), and moreover it cannot properly be occupied, as lakes or even rivers can, and being largely unknown at the first division of the earth, it could not be divided, and so could only become property now by occupation. So far as small portions of the sea—*e.g.*, bays, estuaries, straits,—can be occupied, they may by the law of nature become the property of nations, and even of individuals, or may be divided between several (ii. 3, § 8); but even such ownership may be contrary to the law of nations—*i.e.* consent or custom (ii. 3, § 10). Thus it was part of the Roman *jus gentium* that the sea was common to all men (*ib.* § 9).

In his chapter "On Contracts" (ii. 12) Grotius does not advance beyond ARISTOTLE (*q.v.*) in his views about value or money, except in so far as he recognises that deferment of payment and other such "accidents capable of being valued" may affect the price (§ 14)—a principle of importance among casuists in regard to the question of interest. Not all monopolies, he holds, are contrary to the law of nature: they may be permitted by a government for a just cause, as in the case of Joseph in Egypt. But a combination to raise prices or prevent by fraud or force the importation of a large quantity of a commodity is wrong (§ 16).

Contrary to the more received opinion, Grotius holds that usury is not forbidden by the law of nature, and points out the fallacies of the usual arguments about the barrenness of money, etc.; but since the divine law forbade Hebrew to lend to Hebrew money on usury, and "since precepts of this sort bind Christians also as being called to a higher pitch of virtue," and since what was a duty towards a fellow-countryman then is for Christians a duty towards all men, usury seems forbidden to Christians by the positive divine law (ii. 12, § 20). But for Grotius, as for the mediæval casuists, there are distinctions between the usury which is forbidden and a taking of interest which is

permissible. "Human laws," he says, "which allow something to be covenanted for the use of money, if the rate lie within a due compensation, are not opposed to natural or divine law,—as in Holland it has long been granted to persons in general to require 8 per cent per annum, and to merchants 12 per cent. If they exceed that standard, laws may afford impunity, but they cannot give a right" (*Ibid.* § 22).

[The *De Jure Belli et Pacis* has been edited by Whewell, with an English translation which omits some of the superfluous quotations. 3 vols., Cambr., 1853. The translation was also published separately. There is a careful analysis of the whole work in Hallam's *Introd. to the Literature of Europe*, vol. ii. The accounts of it in Janet's *Histoire de la Science Politique*, in Bluntschli's *Geschichte der neueren Staatswissenschaft*, and in Erdmann's *History of Philosophy* (translated) are much more meagre.—Art. "Grotius" in *Encycl. Brit.* by Mark Pattison.—See also many important references in Maine's *Ancient Law and International Law*.—Austin's *Jurisprudence*.—Hall's *International Law*, and in Dr. Bonar's chapter in his *Philosophy and Political Economy*.] D. G. R.

GROUND-ANNUAL (Scotland) a yearly revenue or perpetual annuity payable out of land. (1) In lands originally church lands the superiority or lordship is in many cases in the crown, the vassal holding by tenure direct of the crown at a nominal rent, but paying an annual sum or "ground-annual" to the crown grantee of the revenues of the church lands. (2) In modern practice the building-land speculator, for example, takes land on feu, and, where sub-infeudation is not prohibited at law or by agreement, he sublets to builders at an enhanced Feu-Duty (see *Feu*); but where sub-infeudation is prohibited, he disposes or grants the land to be held not of himself, but of the superior or overlord, subject to a reserved perpetual annual charge or "ground-annual," to be paid to himself his heirs and assignees. This reserved charge, which in its nature is similar to the chief rents frequently affecting freehold land in the North of England, is made a burden affecting the land itself; and usually the grantee executes a bond, in which he disposes the land back to the granter, but only as a security for the annual payment, for which he also becomes personally liable under the so-called "bond and disposition in security." The documents in the transaction are recorded in the land registers.

A. D.

GROUND RENTS. The expression ground rent is generally used in connection with building leases. It is sometimes said or believed that the ground rent represents the yearly value of the ground as distinguished from the value of the building, but this is not necessarily the case. The lessor may prefer to let the land for a lump sum payable at once and to take no rent (a "peppercorn rent"), or a merely nominal annual sum, in which case the ground

rent is of course much less than the yearly value of the land. On the other hand annual payments are called ground rents in many cases, in which case they really represent part of the annual value of the building. This arises more especially in the case of "improved ground rents." A builder, having taken a building lease at an annual rent of £10, and having built a house costing £2000, may deal with the property in a great variety of ways. He may assign the lease to an occupying tenant for a price exceeding £2000, the purchaser undertaking to pay the original ground rent; he may let the house on a short lease for a yearly rent representing the full yearly value, in which case the rent is called the rack rent; or he may, in consideration of a premium of £2000, grant an underlease for the whole term at an increased ground rent, the increase representing the profit on the transaction. In the last mentioned case the rent is called an "improved ground rent." In order to make the purchase look attractive he may charge a smaller premium than £2000, which will of course necessitate a further increase in the improved ground rent, but in such a case, which in practice occurs pretty frequently, the so-called ground rent partly represents the interest and sinking-fund for the cost of the building, and to that extent exceeds the annual value of the ground. It is sometimes said that ground rents do not pay local rates, but this is a fallacy. The rates are charged on the rack rents, that is to say on the full value, which, of course, includes the ground rent. No doubt the rates are, as a rule, paid by the occupying tenant, but this is generally a condition of the lease, and the tenant, knowing that he has to pay the rates, pays so much less rent (see *FINANCE, GENERAL PRINCIPLES OF; TAXATION*).

In the language of auctioneers and others the expression ground rents is frequently used to describe property let on building leases, but this is, of course, inaccurate. The expression "ground landlord" which is often used for the ultimate recipient of ground rents, is also misleading and connected with the popular idea that the lessor owns the land and the lessee the house. During the continuance of the lease the lessor has a merely reversionary interest in the land and the house, the lessee being, subject to the conditions of the lease, their temporary owner. The ownership of the house cannot in any sense be severed from the ownership of the land, and the benefit of an increase in the value of the land in the case of a long lease accrues to the lessee, and not to the lessor, at least not before the expiration of the lease. This fact is also frequently lost sight of when new schemes of taxation are discussed. German writers use the word *Grund-rente* in the sense of economical rent.

[Much interesting information on these subjects

can be found in Mr. C. H. Sargent's books, *Ground Rents and Building Leases*, and *Urban Rating*.—For a different view see B. Costelloe, *Incidence of Taxation* (1893).—*Rep. of Sel. Comm. H. of C. on Town Holdings.*] E. S.

GROWING CROPS, though not severed from the land, and therefore, strictly speaking, part of the land, are for some purposes looked upon as things not partaking of the nature of real property (see EMBLEMENTS). For the purpose of the Bills of Sale Act (see BILL OF SALE), growing crops, when separately assigned or charged, are deemed to be personal chattels; but when they are assigned or charged together with any interest in the land on which they grow, they are looked upon as part of the land, and the document embodying the assignment or charge need not be registered as a bill of sale. E. S.

GROWTH, PROPORTIONATE, may be defined as the increase of a quantity relative to its initial value. For instance the export of coal from England being 23·6 million tons in 1880 and 38·2 million in 1890, the proportionate growth of the export during the period 1880-90 is $(38·2 - 23·6) \div 23·6 = 1\frac{1}{3}\frac{1}{6}$ or nearly 62 per cent. In general terms, if x_0 be the value of the quantity at the beginning of the period under consideration and x_1 at the end, the proportionate growth during that period is $(x_1 - x_0) \div x_0$. If in a second period the quantity changes from x_1 back to x_0 , the proportionate growth downwards, or decrease, is by parity $-(x_1 - x_0) \div x_1$ —not the mere negative of the growth upwards, as might seem natural. An attempt to obviate this anomaly is made by Mr. Cooley in "Observations on the Measure of Change" in the *Journal of the American Statistical Association* for March 1893. It may be observed that the difficulty disappears when the growth is small.

Proportionate growth may be considered as relative to, or dependent on, some variable other than *time*. Thus the proportionate growth of the demand for a commodity corresponding to a small proportional growth or percentage increment of its price is the measure of Elasticity of Demand (see DEMAND).

The conception of the proportional growth of a quantity being independent of the particular scale or unit employed in measuring the quantity, is particularly appropriate when we want to compare the increase of different things. The ordinary graphic representations of *absolute* growth are not so well suited for this purpose. Thus suppose that, to quote Prof. Marshall, "the consumption per head of tea and sugar in the United Kingdom for the years 1860 to 1883 is represented to the same scale in pounds" in two ordinary curves. "The danger of the popular use of statistical curves is illustrated by the fact that an orator might perhaps carry his audience with him, while he argued that they showed a much more rapid growth of the

consumption of sugar than of tea. But, really, there is very little difference between the two as is seen on comparing 'two curves' in which a pound of sugar is compared against, not a pound, but an ounce of tea" (see GRAPHIC METHOD in connection with Fig. 4).

(Marshall, *Principles of Economics*, bk. iii. ch. iv. p. 160 *et seq.*—*Journal of the Statistical Society*, Jubilee vol. 1885, p. 257 *et seq.*)

F. Y. E.

GRUNDLER, CHRISTIAN GOTTLÖB (latter half of 18th century), merchant in Berlin, author of various treatises on commercial subjects.

Ueber den grossen Nachtheil der Monopolen gegen freye Manufakturen (1787).—*Allgemeine Beiträge zur Handlung* (Berlin, 1788).—*Ueber die Messe zu Frankfurt a. O.* (Berlin, 1807).

R. H. H.

GUARANTEE. A contract by which one person—called the surety—undertakes to be liable for the debt of another person—called the principal debtor. A contract of this nature must, in accordance with § 4 of the Statute of Frauds, be in writing; but § 3 of the Mercantile Law Amendment Act provides that it shall not be necessary for the consideration to be set out in writing. This does not, of course, dispense with the necessity of a consideration in all cases where the contract is not made by deed, but the granting or continuing of a loan to the principal debtor is in itself a sufficient consideration to support the promise of the surety.

It is frequently doubtful whether a guarantee is intended to be a continuing one or whether it is merely intended to refer to a special transaction, and the surrounding circumstances may be considered in order to ascertain the intention of the parties (see, for instance, *Leathley v. Spyer*, L. R. 5 C. P. 595). A contract of guarantee must be distinguished from a contract of indemnity, which may be valid though not in writing. The distinction is shown in the well-known case of *Birkmyr v. Darnell* (1 Smith, Leading Cases, 8th ed., p. 326), and expressed in the following words: "If two come to a shop and one buys and the other, to gain him credit, promises the seller: *If he does not pay you, I will*, this is a collateral undertaking, and void without writing by the Statute of Frauds. But if he says: *Let him have the goods, I will be your paymaster, or I will see you paid*, this is an undertaking as for himself, and he shall be intended to be the very buyer, and the other to act as but his servant," but it is often very difficult to decide what was the intention of the parties as to these points (see *in re Hoyle* (1893), 1 Ch. 84).

A creditor who is secured by a guarantee must be careful not to alter the terms of his arrangement with the principal debtor without the concurrence of the surety, as a disregard of

this rule may have the effect of discharging the surety.

A surety, after having satisfied the creditor, is entitled to an assignment of all securities held by the creditor in respect of such debt, and to use all remedies of the creditor in order to obtain from the principal debtor or any co-surety repayment of the sums expended by him.

[De Colyar, *Law of Guarantees*, 3rd ed., 1897.]

E. S.

GUARANTYISM, a term introduced by WILLIAM ELDER (*q.v.*) to denote the various charitable, savings, and philanthropic agencies organised to promote thrift.

GUARD RENTS, CASTLE-GUARD RENTS.

Castle-guard or castle-ward was a form of military service which seems to have been more common in the south and east of England than elsewhere. The tenants, who held lands in virtue of this service, did not follow their lord to war; their duty was the defence of his castle, where they were obliged to assemble on the approach of an enemy, and remain to assist the regular garrison till the danger was over. In later years this service was compounded for by an annual money payment called castle-guard rent. A long list of guard-rents, in connection with Dover Castle, dated 46 Henry III. is preserved in the *Red Book of the Exchequer*. There is a similar list at the public record office, dating from about 1680. This species of rent is not yet obsolete, for the Earl of Chichester, as owner of Hastings Castle, still receives guard-rents from tenants in the Rape of Hastings.

[C. I. Elton, *The Tenures of Kent*, London, 1867.—*Archæological Review*, i. 57, London, 1888.—*Red Book of the Exchequer*, folios 194 d. and 195.—*Public Record Office Calendars and Indexes*, No. 83.]

A. E. S.

GUARDIANS OF THE POOR. The title and office of guardian appear in Gilbert's Act of 1782 (22 Geo. III. c. 83). Where an incorporation of parishes was formed (see GILBERT'S ACT) the relief of the poor was to be administered by paid guardians, nominated by the justices of the peace, one to represent each of the incorporated parishes. The Poor Law Amendment Act (4 & 5 Will. IV. c. 76) combined parishes into unions for poor-law purposes, and gave the administration of the law to guardians of the poor. Guardians were of two kinds, (1) elected by the several parishes of a union, or by the several divisions of a parish. They were elected annually, or in an increasing number of cases triennially, by owners and occupiers under Sturges Bourne's Act, by which every £50 of rateable value gives a vote up to six; (2) *ex-officio* guardians, viz. justices of the peace for the particular county, riding, or division, who resided in the respective unions. There were in 1893, 20,687 elected and 7412 *ex-officio* guardians in England and Wales. The quali-

fications, election, and tenure of office have been greatly modified by the Local Government Act of 1894 (56 & 57 Vict. c. 73). Under this act *ex-officio* guardians are abolished. Henceforth every person who represents a parish as guardian will be chosen for three years by the parliamentary and county council electors. The qualification for a guardian is to be an elector or to have resided for twelve months. Sex and marriage are no disqualification. A chairman, vice-chairman, and two members, may be co-opted from persons qualified to be guardians. The duty of guardians is threefold: (1) to hear and decide applications for relief; (2) control the various establishments, workhouses, schools, etc.; (3) appoint and control the various officers. The office of guardian is unpaid and voluntary, but one of the most important in the whole range of local government. The effect of a good or bad administration of the poor law is immediately felt over a wide area, and the happiness or misery of thousands depends directly or indirectly upon the action of guardians. Further it is difficult to overstate the importance of the office as a political training.

[Glen, *Poor Law Orders*.—Aschrott, *English Poor Law*.—Nicholls, *History of the Poor Law*.]

L. R. P.

GUARINI, G. B. His claim to recognition lies in the fact that he translated, by direction of Eleanor of Aragon, Duchess of Ferrara, the celebrated work of CARAFA (written originally in Italian between 1469-1482), into Latin, *De regis et boni principis officio*. This translation was printed in 1668 (see COSSA, *Introduction to Political Economy*, translation, p. 158).

A. B.

GUÉRARD, BENJAMIN (1797-1854), a member of the French Institute, rendered invaluable services both to French and Western economic history of the Carolingian period by his able editions of the *Polyptyque* (1836-1844), or census of the Abbot Irminon of Saint Germain des Prés and of the *Polyptyque* of the abbey of Saint Remi in Rheims (1853), and also by his masterly preface (*Prolegomènes*) to the former. In this he explained the condition and status of persons and of land from the time of the invasions of the barbarians to the rise of communal institutions.

[See Dr. Seebohm on "French Peasant Proprietorship under the open field System of Husbandry" in the *Economic Journal*, vol. i. pp. 62-66.]

E. CA.

GUÉRRY DE CHAMPNEUF, JACQUES (1788-1852), first a barrister at Poitiers, then public prosecutor, and about 1820 advocate-general of the *Cour Royale*, was in 1824 appointed director of criminal prosecutions and pardons in the ministry of justice, and in this capacity instituted in 1825 the first annual criminal statistics known under the name of *Compte Général de l'Administration de la Justice Criminelle en France*. He lost his post at the revolution of 1830 and returned to the bar;

but his delicate health and want of leisure never allowed him to publish the results of his juridical and economic studies. E. ca.

GUICCIARDINI, FRANCESCO (1482-1540), was born at Florence, and distinguished himself as an advocate, as a diplomatist, as a civil administrator under pope Leo X. and his two successors, and as lieutenant-general of the papal forces at the defence of Parma. In 1534 he retired to his native city, where he proved a friend to the Medici, and was at the head of the party which brought back Cosmo in 1537.

The fame of Guicciardini will, however, rest on his *History of Italy* from 1492 to 1532. This includes valuable information as to the great trading republics at an interesting epoch. The best edition is that of 1810 by Rosini. A. P. Goddard's translation, London, 1763, is from an incomplete text.

R. H.

GUICCIARDINI, LUIGI (1523-1589), nephew of Francesco GUICCIARDINI, the famous historian. He spent a great part of his life in the Netherlands, where he was at first favoured, but afterwards imprisoned by the Duke of Alva.

Among other works, L. Guicciardini published in 1567 his *Descrizione di tutti i Paesi Bassi*, a detailed geographical and topographical account of the Netherlands, showing the condition, resources, and trade of the country. A third edition, revised by the author, was published at Antwerp (Plantin Press) in 1588.

R. H.

GUILDER. See FLORIN (Dutch).

GUILDS. For all subjects under this heading—CRAFT GUILDS, FRITH GUILDS, MERCHANT GUILDS, TOWN GUILDS, etc., see GILDS.

GUILDS, SYSTEM IN SPAIN. See GILDS, SYSTEM IN SPAIN.

GUILLARD, ACHILLE (1799-1876), was born at Marsigny (Saône-et-Loire). He was an eminent statistician, and also much devoted to the study of natural science, particularly of botany. The most important economic work by Guillard is his valuable and laborious *Éléments de statistique humaine ou démographie comparée*, 8vo, 1855.

A. C. F.

GUILLAUMIN, URBAIN GILBERT (1801-1864), was born at Coulevre near Moulins, and died at Paris. He was a very intelligent publisher, and in that capacity greatly contributed, through the influence of the many important works which were issued from his house, to extending the knowledge of political economy in France. As a young man he had to suffer much hardship. He came to Paris in 1819, and went into business. In politics he sided with the opposition, and went so far as to become a *Carbonaro* (see CARBONARI). He was a friend of Béranger, and started at first as a political publisher; but becoming acquainted with Adolphe Blanqui, and with Joseph Garnier, he was led to turn his energy towards a speciality which won him great and

well-deserved renown. Horace Say, son of Jean Baptiste Say, and father of M. Léon Say, aided him by his advice, and gave him also a pecuniary support which was a strong testimony to the character of both men. Guillaumin's two daughters, of whom the eldest, Félicité, died in 1885 at the age of fifty-six, inherited both his administrative ability and his devotion to economic science. The following are the best known publications of this house:

Dictionnaire du commerce et des marchandises, 1835.—*Dictionnaire de l'économie politique*, 1852.

—*Dictionnaire du commerce et de la navigation*.—*Journal des économistes* (monthly), since 1842.—*Annuaire de l'économie politique et de la statistique* (yearly), since 1844.—*Collection des principaux économistes*, 16 vol. large 8vo, 1842.—*Économistes et publicistes contemporains*, 93 vols. 8vo.—*Bibliothèque des sciences morales et politiques*, 64 vols. 18mo, etc. A. C. F.

GUINEA, INTRODUCTION AND RATING OF. Soon after his accession, Charles II. issued a proclamation dated 26th August 1661, under which the older UNITES of James I.—that is to say, those issued prior to 1619, and valued at 22s. (1 lb. troy=£40:18:4)—were to pass current at 23s. 6d.; and all unites of subsequent dates, which up to this period passed at 20s., were to be valued at 21s. 4d.

The legal weights of these coins and their fine gold contents were as follows:—

Unite or Laurel (Value of), 1604-1661.

Name.	Number of pieces in the lb. troy.	Value of lb. troy by tale.	Legal weight in grains.	Fine gold content in grains.
		£ s. d.		
Unite of 1604, rated at 20s. till 1612	37½	37 4 0	154½	141½
Unite of 1604, rated at 22s. from 1612 to 1619	37½	40 18 4	154½	141½
I. Unite or Laurel of 1619, rated at 20s. till 1661	40½	40 18 4	140½	129½
II. Another Unite or Laurel of 1619 rated at 20s. till 1661	41	41 0 0	140½	128½

As the standard weight and fineness of these coins were not modified during the reign of Charles I., or during the Commonwealth, it will be seen that the principal coins of crown gold, containing 22 carats gold and 2 carats alloy, were as shown in this table when the proclamation of 1661 above referred to was issued.

When in 1663 steps were taken to amend the coinage by adopting more modern methods of manufacture, new gold coins were ordered to be struck having current values of 100s., 40s., 20s., and 10s. These twenty-shilling pieces were for the most part struck from gold obtained in Guinea and imported by the African Company, from which circumstance they derived their name, and they bore the device of a

"little elephant," the stamp of that company. It is hardly necessary to state that gold pieces of the value of 20s. had long been used, having been first struck by Henry VII. in 1489; but from the accession of Charles II. the guinea at once took its place as the principal gold coin in this country, a position which it maintained until the great currency reform of 1816.

The weight of the "guinea" being based on that of the second unite of 1619, with a currency value of 21s. 4d., it follows that, as the pound troy produced forty-one of these latter pieces, each twenty-shilling piece weighed $131\frac{2}{3}$ grains, and the pound of gold was valued at £43 : 14 : 8. In 1670, a fresh indenture directed that the pound should be coined into £44 : 10s.—that is to say, that the weight of each "guinea" should be $129\frac{2}{3}$ th grains, which is identical with the weight of gold of the old standard (994·8) which passed current for 20s., under the indenture made by Charles I. in 1626. Although variations were frequently made in the official rating of the guinea, it may be noted that, in the hundred and fifty years during which it continued to be the principal gold coin of this country, no further change was made in regard either to its weight or its fineness.

During the twenty-five years from 1670 to 1695 the silver currency was gradually reduced, by clipping and other forms of fraud, to such an unsatisfactory state that, although no legal change had been made in the valuation of the guinea, it was impossible for its equivalence to twenty shillings in silver to be maintained; and in the latter year, in consequence of a memorial received from merchants and others, which showed that the guinea commonly passed for 30s., the House of Commons resolved, on the 15th February 1695, that this coin should not pass above a rating of 28s. Within a fortnight—that is to say, on the 28th February—an act was passed by which the rating was further reduced to 26s. from and after the 25th March 1696; and by a later act of the same session it was directed that from the 10th April 1696 the rating should not exceed 22s. The recoinage of silver, which was now being seriously taken in hand, greatly aided the steps taken to regulate the currency of the guinea; and towards the latter end of 1698, the silver recoinage being then well advanced, a report was presented to the House of Commons by Locke and others pointing out that, by fixing its value at 22s., gold was overvalued in this country as compared with Holland, and recommending that the rate should be reduced to 21s. 6d. The House resolved, therefore, "that, under the Act 7 and 8 William III. c. 19, no person is obliged to take guineas at twenty-two shillings apiece," and they were generally received at the lower rate of 21s. 6d. The value thus determined upon was maintained for several years, and, although Sir Isaac Newton, in a report to the

Lord High Treasurer in 1711-12, pointed out that "gold is over-valued in England in proportion to silver by at least 9d. or 10d. in a guinea," no action was taken with a view to revise the rating until the 12th August, 1717, when Sir Isaac Newton was directed by the Lords Commissioners of His Majesty's Revenue to lay before them "a state of the gold and silver coin of this Kingdom in weight and fineness, and the value of gold in proportion to silver," etc. In the classic report which he prepared, dated 21st September, 1717, he showed that the intrinsic value of the guinea, as deduced from the ratio of silver to gold in all the principal trading nations of Europe, was about 20s. 8d., so that the legal rating was 10d. in excess of the value of the coin. This over-valuation naturally led to large quantities of the silver currency being withdrawn from circulation; and the inconveniences thus occasioned were set forth in an address from the House of Commons to the King, who issued a royal proclamation on the 22nd December 1717, forbidding all persons "to utter or receive any of the pieces of gold coin of this kingdom commonly called guineas at any greater or higher rate or value than one and twenty shillings for each guinea." The valuation thus fixed was maintained unaltered throughout the century which elapsed before gold was made the sole standard of value in 1816; and it was on this basis that the weight of the present principal gold coin, the sovereign, introduced in the following year, was determined.

E. R.

GUINEA TRADE. Englishmen are first known to have traded with Guinea in 1530, for ivory, and not many years later for gold, though the gold from which guineas were coined was first imported by the Royal African Company formed in 1672 (see **AFRICAN COMPANIES, EARLY**). English trade in negroes began in 1562; they were carried to Hispaniola, and there exchanged for goods for the English market; and ten years later the right of England to share in the Guinea trade was acknowledged by the Portuguese, who frequently hired our ships to carry their slaves to Brazil. It was not until 1662 that the direct English trade in negroes for the supply of the American plantations began. Besides slaves, its staple product, Guinea supplied the merchants with ivory, gum arabic, gum senegal, camwood and other woods, bees' wax, cotton, ostrich feathers, ginger, pepper, rice, and palm oil, in exchange for gunpowder, arms and ammunition, lead and iron goods, brass, copper, tobacco, salt, cocoa, woollen, cotton, and linen goods, bugles, and Bengal goods. In most of these articles trade still continues (see **AFRICAN COMPANIES, EARLY**).

[Macpherson, *Annals of Commerce*.—*Gazetteer of the World*, art. "Guinea."—Reclus, *Nouvelle Géographie Universelle*, 1887, tom. 12.—Horton, *The Silver Pound*, 1887.]

E. G. P.

HABIT. The economic influence of habit is defined by Prof. H. Sidgwick (*Principles of Pol. Econ.*, bk. ii. ch. xii.), as "the tendency to do as one has done before." This, while it continually presents obstacles "to the adoption of economic improvement," yet on the other hand "has its counterpart in the tendency to expect to be treated as one has hitherto been treated." . . . "Some claims generated in this way have legal validity; as when a right of way is established without express permission of the landowner."

For the economic effect of the tendency to do as others do, see **CUSTOM**.

HAGEN, KARL HEINRICH (1785-1856), son of a professor of medicine, was born at Königsberg. After studying political science under **HOFFMANN**, he entered the government service, and in 1811 became professor of political science and political economy (*Staatswissenschaften und Gewerbekunde*) at Königsberg, which appointment he retained till 1849, when he sank into a lingering illness.

Hagen's principal work appears to be the one entitled *Von der Staatslehre und von der Vorbereitung zum Dienste in der Staatsverwaltung*, 1839. Of the seven sections into which this work is divided, the second, fifth, and sixth, entitled respectively Sketch of the Science of Political Economy, the Theory of Finance, and the Study of the Functions of Government (*Cameralwissenschaften*), may be recommended to the economist. The first-mentioned of these has been translated by **PRINCE-SMITH**, under the title of a *System of Political Economy* (1844). It is enriched with notes derived from Hagen's other writings and from his lectures, and by additions to the text which the author himself contributed. It is divided into several inquiries, of which the third, relating to value, seems the most interesting. From one of the notes to this part (p. 28), it appears that Hagen had made some advance towards the construction of what would now be called a "demand schedule" (Marshall) or **DEMAND-CURVE**. But the particular formulæ proposed by Hagen are fanciful.

The general conception was employed by him in an interesting attempt to prove the expediency of free trade by mathematical reasoning: *Die Nothwendigkeit der Handelsfreiheit für das Naturreinkommen mathematisch nachgewiesen*, 1844. The argument appears to be vitiated by not including wages, as well as profits, in the measure of the advantage to the community. It may be worth alluding to the demonstration that, on the assumptions made, a slight degree of protection might produce a slight advantage, which turns into a disadvantage as the tariff is increased. Considerable interest attaches to the criticism of **COURNOT's** theories of inter-

national trade, in a note at the end of the brochure, to which Cournot replies in his *Principes* of 1863. Hagen seems to fall short of Cournot with respect to the assumption above indicated; but to have the advantage in another respect. In estimating the change in the national revenue due to a new import (and *mutatis mutandis* a new export) Hagen takes account of the circumstance that the native labour displaced by the importation is apt to be employed in some other industry. He also professes to take account of the advantage which consumers of the imported commodity derive from a fall in its price. But, like Cournot, he misses the proper conception of **CONSUMERS' RENT**.

Besides the two works mentioned, Hagen is also the author of some articles in *Beiträge zur Kunde Preussens*, 1803-24; and of the following works: *On Platina Coin* (mentioned without date in the note to the *System of Political Economy* above referred to).—*Observationes economico-politice in Æschini dialogum qui Erycius inscribitur*, 1822.—*Ueber Einrichtung des Creditvereins von Gutsbesitzern im Königreich Bayern*, 1825.—*Aufklärung ueber das Sinken des Werthes des Geldes; aus dem Englischen*, 1839. Of these writings none except the first-named and the works referred to in the text have come under the eye of the present writer. [*Allgemeine Deutsche Biographie*.—Article by Prof. Edgeworth on "International Values," *Economic Journal*, vol. iv. p. 629.] **F. Y. E.**

HAIJA. See **FORESTS, MEDIEVAL**.

HAINES, RICHARD (17th century), is said to have been a Sussex gentleman (*Bread for the Poor*, by Philo-Anglicus, 1678, p. 4); he was evidently a royalist in his opinions, and speaks in one place (end of *England's Weal and Prosperity*) as if he were a member of parliament, but his name does not appear in the lists in *Cobbett's Parliamentary History*.

Haines wrote the following pamphlets, all very similar, to advocate his favourite remedies for social and economic evils:

The Prevention of Poverty, or a Discourse of the causes of the Decay of Trade, etc., 1674.—*Proposals for building in every County a Working-Alms-House or Hospital*, 1677 (reprinted in the *Harleian Miscellany*, 1810, vol. viii.).—*New Lords, New Laws, or a discovery of a grand usurpation, etc.*, 1674. (Matthew Caffin replied to this pamphlet, *Envy's Bitterness corrected with the Rod of Shame*, 1674.—*Provision for the Poor, etc.*, 1678.—*A Model of Government for the Good of the Poor and Wealth of the Nation*, 1678.—*A Method of the Government for such Public Working-Alms-Houses as may be erected in every County for bringing all Idle Hands to Industry*, 1679.—*A Brevint of some Proposals prepared to be offered to the Great Wisdom of the Nation*, 1679.—*England's Weal and prosperity Proposed*, 1681.

His sovereign remedy for decrease of exports and increase of imports, for mendicancy and pauperism, was the erection of great factories,

locally governed and established by rates, where the unemployed poor, whom he computed at 200,000, and even criminals, might be set to make linen or woollen cloth, for wages low enough to enable England to undersell foreign goods. The plan is not very carefully thought out; many of the difficulties which would arise being wholly overlooked. In the second pamphlet he mentions, without explanation, his invention of a plan by which "one man may turn fifty spinning wheels which shall serve a hundred persons to spin with at once; so that the spinners shall have nothing to do but employ both hands to draw tire from the distaff"; and also of "an engine by which fifty men may, without striking a stroke, beat as much hemp in one day as a hundred shall do in two days." E. G. P.

HALE, SIR MATTHEW (1609-1676), a native of Alderley in Gloucestershire, entered at Lincoln's Inn in 1629, and practised successfully at the bar. Though decidedly royalist in views he took no active part in politics, even during the civil war, and accepted a judgeship from Cromwell in 1653. He represented Gloucestershire in the parliament of 1654, Oxford university in that of 1658, and Gloucestershire again in the convention parliament which restored Charles II. in 1660. The same year he was made lord chief baron, and was knighted, and in 1671 he became lord chief justice. Ill-health induced him to resign this post early in 1676, and he died at the end of the year.

In addition to several legal and scientific and many religious works, Hale wrote *Primitive Origination of Mankind*, 1677, some chapters of which have been published separately as an *Essay on Population*, 1782, but are not very valuable; *De Successionibus apud Anglos*; *The law of Hereditary Descents*; and *Touching Provision for the Poor*, printed in 1683. In this he summed up existing laws, pointed out their defects, and suggested remedies. As the only radical cure for mendicancy and poverty he proposed the establishment of workhouses, for which purpose parishes should be grouped in unions; after their erection by means of the rates they were to become self-supporting—places of industrial education for children and of employment for the poor, especially when other work was scarce.

[*Life and death of Sir Matthew Hale*, by Bishop Burnet, 1682.—Wood's *Athenae Oxonienses*, 1817, vol. iii.—*Memoirs of the Life, Character, and Writings of Sir Matthew Hale*, by J. B. Williams, 1835.—*Dict. of National Biography* (this gives some of the dates one year later than the other accounts). Campbell, in *Lives of Chief Justices*, dwells at length on Hale's political position.]

E. G. P.

HALE, NATHAN, LL.D. (1784-1863), was born in Westhampton, Mass., graduated at Williams College in 1804, and became a journalist and the editor of the Boston *Advertiser* in 1814. He was among the first to encourage the construction of railways in New England. He wrote *Remarks on the*

Banks and Currency of the New England States, in which an Attempt is made to show the Public Benefits resulting from the System pursued by the Allied Banks of Boston, Boston, 1826, pp. 40, in commendation of the Suffolk bank system. This was a system devised for the more prompt redemption of state bank bills—bills which were often depreciated in value, and regarded with suspicion in localities other than the place of issue. This practice was introduced to a limited extent in Boston in 1813, but not fully developed until 1825. The work of assorting and returning the notes to the place of issue was finally undertaken by the Suffolk bank of Boston, from which this policy took its name. It was confined, however, to New England banks, but aided much in giving a sounder banking administration.

He also wrote *The American System; or the Effects of High Duties on Imports designed for the encouragement of Domestic Industry*, Boston, 1828, pp. 56. He objected to extending the American system of high duties, and questioned the expediency of a warehousing system. It is a strong argument, and is said to have done much to bring about the compromise tariff of 1833. D. R. D.

HALES, JOHN (16th century), was connected with the well-known Kentish family. He does not appear to have been at any university, but he was a man of wide and varied learning, and founded the grammar school at Coventry. He was clerk of the hanaper in the time of Edward VI. and sat for a time in parliament as member for Preston. The chief economic interest connected with him is due to the active part he took in the commission on enclosures in 1548. His elaborate defence of himself and some other papers have been recently printed in full (*Discourse of Common Weal*, Introduction), and amplify the information in the extracts given by Strype.

Recently good reason has been shown for attributing to Hales the well-known *Examination of Complaints* of which W. S. claimed to be the author. Miss Lamond has shown that during his life he was regarded by some people as its author, and has adduced strong reasons from internal evidence in support of this view. Since she published her essay (*English Historical Review*, April 1891), it has received general acceptance. The full evidence, with many biographical details, will be found in her edition of the dialogue published in 1893 under the title *A Discourse of the Common Weal of thys Realm of England*.

If this view be correct it at once appears that Hales was, as an economist, much ahead of contemporary opinion. His views on the evils of a debased currency, on the balance of trade, on exclusive corporations, and on other subjects are extremely interesting. Hales may well get the credit of having expressed them well and clearly, though there seems to be some reason to believe that he had not thought out these opinions for

himself, but was chiefly the mouthpiece of Hugh Latimer (see LATIMER). On the economics of the dialogue, compare the review of the discourse in the *Economic Journal*, December 1893. W. C.

HALF-CROWN. English coin struck both in gold and silver, concurrently with the gold and silver crown pieces, of the same fineness and of proportionate weight to those coins respectively (see CROWN). F. E. A.

HALF-IMPERIAL (see IMPERIAL).

HALFPENNY. English coin, struck in silver, copper, and bronze.

Silver Halfpenny:

Reign.	Year.	Weight (grains).	Fineness.	Value.	
				In silver 925 fine, at 5s. 6d. an oz.	In standard silver francs, 900 fine.
Edward I.	1200	11	925	d.	franc.
" III.	1244	10	"	1.512	.146
" III.	1251	9	"	1.375	.133
Henry IV.	1312	7.5	"	1.237	.120
Edward IV.	1461	6	"	1.031	.099
Henry VIII.	1527	5	"	.825	.080
Edward VI.	1552	11	"	.787	.065
Mary	1553	12	"	1.512	.146
Elizabeth	1553	12	"	1.650	.159
"	1601	4	"	.550	.053
"	1601	3.75	"	.516	.049

Copper halfpence were first struck in Charles II.'s reign, and *bronze halfpence* in 1860, on the first adoption of bronze coinage in England. See COPPER MONEY (England). F. E. A.

HALF-SOVEREIGN. English gold coin.

Reign.	Year.	Rating.	Weight (grains).	Fineness.	Value in gold 916.6 fine, at £8:17:10½ an oz.	
					£	s. d.
Henry VII.	1485	10	128.00	994.8	1	2 6½
" VIII.	1543	"	100.00	916.6	0	16 3
" VIII.	1545	"	96.00	"	0	15 7
Edward VI.	1549	"	84.625	"	0	13 8
" VI.	1550	12	120.00	994.8	1	1 1½
" VI.	1551	10	87.25	916.6	0	14 2
Elizabeth	1558	"	"	"	0	14 2
"	1601	"	86.00	"	0	13 11½
George III. (and subsequently)	1817	"	61.43	"	0	10 0

The value of the current half-sovereign in gold francs, 900 fine, is 12.61 fr. (see POUND STERLING). F. E. A.

HALIFAX, CHARLES MONTAGUE, Earl of (1661-1715), the distinguished statesman and financier, was educated at Westminster School, and at Trinity College, Cambridge, where he formed a lifelong friendship with Sir Isaac Newton. Entering upon a political career, he signed the invitation to the Prince of Orange, was returned to parliament for Malden, and sat in the convention. Quickly developing a remarkable talent for financial business, he was made, in 1691, one of the commissioners of the treasury, and called to the privy council. In December 1692 he proposed, in the House of Commons, to raise a million sterling by

of a loan. William III. required money for his wars; the moneyed classes desired sounder investments than bubble companies; the landed proprietors were hard pressed by the weight of taxation, and some new financial expedient was necessary. Montague's loan bill was consequently accepted, and it passed both Houses without opposition. Thus was laid the foundation of the national debt. "By this memorable law," says Macaulay (*History of England*), "new duties were imposed on beer and other liquors. These duties were to be kept in the exchequer separate from all other receipts, and were to form a fund on the credit of which a million was to be raised by life annuities. As the annuitants dropped off, their annuities were to be divided among the survivors, till the number of survivors was reduced to seven. After that time, whatever fell in was to go to the public. It was therefore certain that the 18th century would be far advanced before the debt would be finally extinguished; and, in fact, long after King George the Third was on the throne, a few aged men were receiving large incomes from the state in return for a little money which had been advanced to King William on their account when they were children. The rate of interest was to be 10 per cent till the year 1700, and after that year 7 per cent."

By the spring of 1694 it became again absolutely necessary to find some new mode of defraying the war charges. Three years before, William Paterson, an ingenious Scotsman, had propounded a plan for a national bank. The scheme was favourably regarded, but nothing was done. Montague, however, now furthered the plan, and engaged to carry it through the House of Commons, while Michael GODFREY, an upright and opulent merchant, agreed to manage the city. An approving vote was obtained from the committee of ways and means, and Montague introduced a bill whose title gave rise to much comment and sarcasm. "It was indeed not easy to guess that a bill, which purported only to impose a new duty on tonnage for the benefit of such persons as should advance money towards carrying on the war, was really a bill creating the greatest commercial institution that the world had ever seen. The plan was that £1,200,000 should be borrowed by the government on what was then considered as the moderate interest of 8 per cent. In order to induce capitalists to advance the money promptly on terms so favourable to the public, the subscribers were to be incorporated by the name of the Governor and Company of the Bank of England. The corporation was to have no exclusive privilege, and was to be restricted from trading in anything but bills of exchange, bullion, and forfeited pledges" (*Macaulay's England*). In order, however, that the bank should not have the power over the national purse, a clause was inserted in the

act which inhibited the bank from advancing money to the crown without the authority of parliament. So popular was the scheme that the whole sum which the new corporation was bound to lend to the state was paid into the exchequer before the first instalment was due, and the Bank of England was successfully launched upon its career.

Montague was now such an acknowledged master of finance that in 1694 he was appointed chancellor of the exchequer. In the ensuing year he carried out his plan for re-coining the money of the kingdom. The new currency was to be of the old standard both in weight and fineness; all the new pieces were to be milled; the loss on the clipped pieces was to be borne by the public; a time was fixed after which no clipped money was to pass, except in payments to the Government; and a still later time was fixed after which no clipped money was to pass at all. The scheme was carried; Newton was appointed warden of the mint: and to meet the loss on the coinage a tax on windows was imposed instead of that obnoxious impost the HEARTH-MONEY. In 1696, however, the general distress and monetary confusion throughout the country were such that Montague introduced the system of EXCHEQUER BILLS (*q.v.*). He had already succeeded in engrafting on Harley's Land Bank Bill a clause which empowered the government to issue negotiable paper, bearing interest at the rate of threepence per day on one hundred pounds. Accordingly, exchequer bills drawn for various amounts from a hundred pounds down to five pounds, were now issued, and rapidly distributed over the kingdom. Montague also projected the scheme for a general fund, which gave rise to the sinking fund, afterwards established by Sir Robert Walpole. He further devised a method to raise the sinking credit of the Bank of England by a second subscription, and his general mortgage plan was warmly welcomed. The authority which the chancellor of the exchequer now wielded in financial matters was unprecedented, and he was publicly thanked by the House of Commons. In 1697 he became premier, but, owing to his vanity and arrogance, his popularity began to wane, and he was obliged to accept the auditorship of the exchequer, and to withdraw from the House of Commons with the title of Baron Halifax. In 1698 he founded a new East India Company, in the interests of greater freedom of trade, and to diminish the power and monopoly of the old company, but both institutions were eventually consolidated in 1708, under the title of "The United Company of Merchants of England trading to the East Indies." The Commons impeached Lord Halifax for breach of trust in 1701, and again in 1703, but the Lords threw out the articles. In 1706 Halifax took a leading part in negotiating the union with Scotland. On the death of Queen

Anne he was appointed one of the council of regency, and when George I. took possession of the throne he was created Earl of Halifax, and became first commissioner. Disappointed at not becoming lord high treasurer, he intrigued with the tory leaders, but his schemes and his life ended suddenly on the 19th May 1715.

[Chalmers's *Biographical Dictionary*.—Coxe's *Memoirs of Walpole and Marlborough*.—*Life and Works of the Earl of Halifax*, 1715.—Macaulay's *History of England*.—Thorold Rogers, *First Nine Years of the Bank of England*, 1887.]

G. B. S.

HALL, CHARLES, M.D. (1745? - 1825?) author of *The Effects of Civilisation in European States*, London, 1805, republished in J. M. Morgan's Phoenix Library, 1850. After a general view of the ills of society, which anticipates Henry George and the later socialists, wherein landed property is stated to be "the basis, source, and substance of all wealth," into which "all must be resolved," it is curious to find the remedies advocated are the abolition of primogeniture and the repression or at least the severe taxation, of "refined manufactures." Hall afterwards, however, suggests a form of state ownership of the land, coupled with individual ownership of the produce. In Morgan's *Hampden in the 19th Century*, London, 1850, Hall is mentioned as having died in the Fleet prison at eighty. "His conversation was particularly animated and intelligent." Hall states that his experience as a doctor led him to consider the sufferings of the poor. He writes from Tavistock. Much stress is laid on the importance of Hall's book, as anticipating the later socialists, by Anton Menger, who, in his *Recht auf den vollen Arbeitsertrag*, 2nd ed., 1891, devotes a section, pp. 57-60, to an analysis of its arguments.

[*Dictionary of National Biography*, vol. xxiv. p. 60.]

H. E. E.

HALL, VAN. See VAN HALL.

HALL-MARKING. Hall-marks are impressions made at a public assay office upon gold and silver wares to indicate the fineness of the metal of which they are composed.

Hall-marking was first introduced in the year 1300, when, at the instigation of the English Gild of Gold and Silver Smiths, the system was enforced by Royal Command, and by the provisions of Stat. 3, cap. 30, of Ed. I. it was necessary to impress upon each piece of plate assayed the effigy of a leopard or a lion's head crowned. This was called the *king's mark*. A second mark, known as the *maker's mark*, was added in 1363 (37 Ed. III., cap. 7); and subsequently a third was introduced called the *assayer's mark* or *year letter*, consisting of a letter of an alphabet used for each year; when one type of letter was exhausted another was adopted. This system of indicating the date is still in use.

The marks used in England in recent times are five in number.

1. The *maker's mark*, the initials of the maker's name.

2. The *standard mark*, or mark to indicate the fineness of the metal.

For gold wares this is as follows :—

For gold 22 carats fine—22 surmounted by a crown.

" 15	" 18	"
" 15	" 15 and '625.	"
" 12	" 12 and '5.	"
" 9	" 9 and '375.	"

For silver wares as follows :—

For silver 11 oz. 2 dwt. fine	} or 925 fine—a lion passant.
" 18 " alloy	
" 11 oz. 10 " fine	} or 958.3 fine—Britannia.
" 10 " alloy	

3. The mark of the *assay office*.

For London—a leopard's head.

" Birmingham—an anchor.

" Sheffield—a crown.

" Chester—a dagger and three wheat sheaves.

" Exeter—a castle with three towers.

" Newcastle—three castles.

" Edinburgh—a castle.

" Glasgow—a tree, a fish, and a bell.

" Dublin—Hibernia.

4. The *year letter* or date mark (described above).

5. The *duty mark*, the head of the reigning sovereign. This mark, which was introduced in 1784, and was continued till the early part of Queen Victoria's reign, is not now used.

Report of Select Committee on Hall-marking with proceedings, evidence, and appendix of acts, etc., 1878 (House of Commons, 328). F. E. A.

HALLER, KARL LUDWIG VON (1768-1854), born in Bern, entered the State Office (*Staatskanzlei*) of the republic of Bern at the early age of sixteen, and was wont to congratulate himself on having never attended the lectures of a university, "as he was thus obliged to think for himself." He was sent as secretary on several foreign missions, and after the occupation of Bern by the French republican armies, was admitted into the Austrian civil service. Appointed professor of law in the academy of Bern in 1806, and member of the sovereign council in 1814, he was compelled to resign his professorship in 1817, when he became a Roman Catholic; up to the year 1830 he chiefly lived in Paris, writing in legitimist papers and living amongst the reactionary society of the French metropolis. After the revolution of 1830, he returned to Switzerland and resided in Soleure, where he died in 1854.

In 1808 he published his *Handbuch der allgemeinen Staatenkunde* which may be considered as the kernel of his large work: *Restauration der Staatswissenschaft oder Theorie des natürlich-geselligen Zustands der Chimäre des künstlich-bürgerlichen entgegengesetzt* (Winterthur, 6 vols., 1820) of which he himself wrote an (incomplete) French translation under the title of *Restauration de la Science Politique ou Théorie de l'État social naturel opposé à la fiction d'un État civil factice* (Lyons, 3 vols., 1830) in which he shows

himself a warm admirer of the Middle Ages and an uncompromising opponent of the theory of the social contract and of constitutional government. The heading of the 13th chapter of vol. i. strikes the keynote of his doctrine: *Natürliche Ueberlegenheit ist der Grund aller Herrschaft, Bedürfniss der Grund aller Abhängigkeit und Dienstbarkeit* (Natural Superiority is the Basis of all Sovereignty, Want the Basis of every State of Dependence and Subjection). The domination of the strongest is for him the universal law of nature. He is essentially a writer on political subjects; but he deals in vol. ii. with economic questions, still always in the light of his mediæval leanings. Ownership in land (ii. pp. 36-60) is a natural institution. The prince ought to live on his private income; if taxes are needed, they ought to be demanded, but always freely granted. The property and disposal of the proceeds of taxation belong to the prince, if not otherwise specified at the time they were granted. Taxes may be infinitely varied; a perfect proportional equality is impossible to reach. All have their faults; the best are those which come nearest to voluntary contributions (pp. 272-354); the foundation of charitable, scientific, and literary institutions is the outcome of moral duty; it has no compulsory and imperative character. It is dangerous to make them completely the prince's affair; they are often best provided for by private individuals or associations (pp. 359-366).

[For a critical account of Haller, see Mohl, *Geschichte und Litteratur der Staatswissenschaften*, ii. pp. 529-560 and *Zeitschrift für Staatswissenschaft*, Tübingen, 1870, vol. xxvi. pp. 93-105; as also Roscher, *Gesch. der Nat. Oek.*, pp. 779-788.]

E. Ca.

HALLEY, EDMUND, LL.D., F.R.S. (1656-1742), the well-known astronomer, author of numerous astronomical and mathematical works, was the inventor of life tables of mortality. He was elected a fellow of the Royal Society in 1678, and became its secretary in 1713; was appointed Savilian professor of geometry at Oxford in 1703, and astronomer-royal in 1721. He was the friend of Sir Isaac Newton, in the publication of whose *Principia* he took an important part.

Halley's *Tables of Mortality from Observations made at Breslau*, read before the Royal Society in 1692, and published in the same year in the *Phil. Trans.*, No. 196, though they passed unnoticed at the time, except perhaps in Germany, served as a pattern for future calculators. They have been reprinted in vol. xviii. of the *Assurance Magazine*. "They show the annual movement of a population, the probability of survivorship, the average duration of one or more lives and the money values depending thereon" (*Assurance Magazine*, vol. vi. p. 138). [Walford, *Insurance Cyclopaedia*.—*Dict. of National Biography*.—Graetzer, *E. Halley und Caspar Neumann*, 1883.—Lalande, *Préface Historique aux Tables de Halley*, 1759.—Delisle's *Lettres sur les Tables de Halley*, 1749.—R. Boeckh *Halley als Statistiker*, 1893.]

E. G. P.

HAMBURG, BANK OF. See BANKS.

HAMILTON, ALEXANDER (1757-1804), was born in Nevis, West Indies. At the age of fifteen he was sent to New York to be educated. He sided with the colonists in the dispute with the mother country, which was rapidly approaching a crisis, and soon by his activity and vigorous writing attracted the attention of the older leaders. Hamilton was entrusted with responsible positions, and from 1776 to 1781 served as aide-de-camp on Washington's staff. Although occupied with military and political duties, he found time at this period to read widely in history, political economy, and finance. His notebooks and letters display a wonderful comprehension of financial problems, generally to be obtained only by actual experience. In 1781 he entered upon the study of the law, and was appointed continental receiver of taxes for New York. During 1782-1783 he was member of Congress, and wrote a *Report on the Import Duty*, 16th Dec. 1782, works, ed. 1851, vol. ii. 213-223. Hamilton recognised the weakness of the existing form of government, and laboured earnestly to secure the establishment of a strongly centralised government, through the convention of 1787. To secure the adoption of the constitution he co-operated with Madison and Jay in writing the *Federalist*. Upon the establishment of the present form of government in 1789, he was selected, at the age of thirty-two, by President Washington, to take charge of and organise as secretary the treasury department. Rarely has any financier had so many difficult problems presented to him to be solved in so brief a period. Among his many reports the five following are most important: Public Credit, 9th Jan. 1790; National Bank, 13th Dec. 1790; Establishment of a Mint, 28th Jan. 1791; Encouragement and Protection of Manufactures, 5th Dec., 1791; and Public Credit 16th Jan., 1795. These are found in J. C. Hamilton's ed., New York, 1851, vol. iii.; H. C. Lodge's ed., New York, 1885, vol. ii. Finance and Taxation; vol. iii. Finance, Taxation, and Commercial Relations; and in *American State Papers*, vol. i. The first four were issued in a period of less than two years. Besides these reports, Hamilton wrote many others, to be found in the above volumes. All of Hamilton's writings relate to concrete and practical questions of government policy. His state papers are regarded as the ablest issued from the treasury department, showing a remarkable genius in the treatment of finance. As he left, however, no systematic treatise from which his final conclusions may be judged, there has grown up since Hamilton's time a considerable divergence of opinion concerning his real views as to political economy. He differed from R. Morris as to the adoption of a money unit of account for the new coinage, favouring the

dollar instead of the pound or any proportionate part. Although he preferred gold to silver, as more stable, yet, under existing circumstances, he did not regard it wise to contract the quantity of circulating medium, and consequently favoured bi-metallicism. In advising the current ratio of one to fifteen, he did not perceive the influence then at work to lower the value of gold, and consequently underestimated silver. He advised a moderate seignorage. He was convinced of the advantages of a "full circulation," and offered this as one of the reasons for the establishment of a national bank. The active capital would be augmented through the operation of credit. This advantage also strengthened his conclusions as to funding the debt. Stock would pass current as specie. Although he favoured bank notes, he opposed treasury notes; his condemnation of the latter was in words often quoted: "The wisdom of the government will be shown in never trusting itself with the use of so seductive and dangerous an experiment. In times of tranquillity it might have no ill consequence, it might even perhaps be managed in a way productive of good, but in great and trying emergencies there is almost a moral certainty of its becoming mischievous. If it should not even be carried so far as to be rendered an absolute bubble, it would at least be likely to be extended to a degree which would occasion an inflated and artificial state of things incompatible with the regular and prosperous course of the political economy." In advising protective tariff duties, Hamilton argued largely from political considerations. He saw the necessity of immediately strengthening the general government. His economic arguments are as follows: Manufacturing establishments not only occasion a positive augmentation of the produce and revenue of the society, but they contribute essentially to render them greater than they could possibly be without such establishments. This follows because it occasions and affords opportunity for the division of labour, an extensive use of machinery, employment to classes, such as women and children, not generally employed, emigration from foreign countries, greater scope for diversity of talents, and securing a more steady demand for the surplus produce of the soil. Hamilton does not state definitely that these considerations should be controlling factors if it were possible to procure from abroad, on good terms, all the fabrics which it may need. He found nowhere a perfect liberty to industry and commerce—expediency, therefore, must be the principle of action for the United States. He did not believe that industry, if left to itself, would flow in the most profitable channel, for custom was a powerful influence. Hamilton was an active federalist, and, in the cabinet, opposed the influence of Jefferson. He resigned 31st

January 1795, and returned to the practice of the law in New York. He still remained an adviser of President Washington, and frequently engaged in political discussions. For two years he held the position of Inspector-General of the army. In 1804 he engaged in a bitter political controversy with Burr, who challenged him, and Hamilton was mortally wounded in the duel fought 11th July 1804.

[For Hamilton's financial administration, see his *Works* referred to, also *Life of Alexander Hamilton* by John T. Morse, jun., Boston, 1876, vol. i. ch. viii.-xi.—*Alexander Hamilton*, by Henry Cabot Lodge, Boston, 1882, ch. v.—For complete bibliography, see *Bibliotheca Hamiltoniana*, by P. L. Ford, New York, 1886.] D. R. D.

HAMILTON, ROBERT, LL.D. (1743-1829). He studied at Edinburgh, making unusual progress in mathematics under Matthew Stewart, but, though desirous of a literary career, was obliged to enter a bank in order to obtain a knowledge of business, and afterwards to take charge of a paper-mill. In 1769, however, he became rector of the academy at Perth, and in 1779 professor of natural philosophy in Marischal College, Aberdeen. By a private arrangement he taught the mathematical classes instead of his own, and in 1817 obtained the chair of mathematics, which he held until his death.

Besides some mathematical text-books Hamilton wrote an *Introduction to Merchandise*, 1777; three essays on *Peace and War*, 1790, *Government*, and the *Management of the Poor*, 1822; which show enlightened views on economic subjects, e.g. bounties, taxes on necessities, and poor-relief, but a somewhat limited grasp of political matters; and an *Inquiry concerning the Rise and Progress, the Redemption and present State, and the Management of the National Debt of Great Britain and Ireland*, 1813, on which his fame chiefly rests. He was the first not to discover, but successfully to expose, the fallacy underlying Pitt's sinking fund; he proved that "the excess of revenue above expenditure is the only real sinking fund by which public debt can be discharged," and he showed that the existing system was not merely useless, but actually harmful, entailing a high rate of interest and increased cost of management. The *Progress of Society*, 1830, a posthumous publication, treats in simple language of the theories of political economy; the chapters, for example, on value and price are of considerable merit.

[Memoir prefixed to *Progress of Society*.—Chambers's *Biographical Dictionary of Eminent Scotsmen*.—*Dictionary of National Biography*.—Mculloch, *Literature of Pol. Economy*.]

E. G. P.

HANAPER. An ancient office or department of the chancery, so called from the hamper (*hanaperium*) in which certain records were deposited (cp. PETTY BAG). It was the duty of the clerk of the hanaper to take account of all patents, commissions, and grants under

the great seal, and to collect and administer the fees arising from the same. The office was abolished in 1842.

[S. R. Scargill-Bird, *A Guide to the Public Records*, 1891.] A. E. S.

HANCOCK, WILLIAM NEILSON (1820-1888), was the son of Lord Lurgan's land-agent, and was born at Lisburn, county Antrim. He was called to the Irish bar in 1844, was Whately professor of political economy at Dublin University from 1846 to 1851, and professor of jurisprudence and political economy at Queen's College, Belfast, from 1849 to 1853. From 1851 to 1853 he was secretary to the Dublin University Commission, in 1854 to the Endowed Schools of Ireland Commission, and later to several other commissions on Irish subjects. From 1855 to 1866 with a year's interval he was clerk of the custody of papers in matters of idiots and lunatics in the Court of Chancery, and in 1882 he became clerk of the crown and hanaper. He was the chief founder of the Dublin Statistical Society, 1847, and of the Belfast Social Inquiry Society, 1851. Throughout his active life he put forward his economic and social opinions in writing in the form of articles or pamphlets, all marked by knowledge, discernment, and impartiality.

Hancock's works are: *The Tenant-right of Ulster considered economically*, 1845.—*Impediments to the Prosperity of Ireland*, published 1850.—*What are the causes of the Prosperous Agriculture of the Lothians of Scotland?* and, *What are the causes of the distressed state of the Highlands of Scotland?* 1852, all aim at proving, either directly or by comparison with Scotland, that Irish agricultural distress was due not to the race, religion, perversity, or ignorance of the Irish peasant, but to defective land-laws, and mainly to the want of some equivalent to the Ulster tenant-right.—*Three Lectures on the Questions, Should the Principles of Political Economy be disregarded at the present Crisis? and if not, How can they be applied towards the discovery of Measures of Relief?* 1847, discuss the potato famine, deprecating the artificial lowering of prices, and advocating a uniform system of relief in money.—*The Report on the supposed progressive decline of Irish Prosperity*, 1863, brought forward various statistics to disprove such decline, and attributed the increase of emigration to older and deeper-rooted causes than the potato famine.—The question, *Is there really a want of Capital in Ireland?* 1851 (see *Prosperous Agriculture in the Lothians*, p. 16), he answered in the negative.—His *Duties of the Public with regard to Charitable Savings Banks*, 1852, and *The Present State of the Savings Bank Question*, 1855, exposed, by an Irish example, the evils of the existing system, which allowed limited liability and minimised responsibility by dividing it between government and the managers; and advised the abolition of charitable in favour of government or private joint-stock banks.—He also wrote an article on *Local Government and Taxation, Ireland*, 1875, and edited the first two volumes of the *Ancient Laws of Ireland*, 1865.—In some un-

published essays he treated of *The Use of the Doctrine of Laissez-Faire in investigating the Economic Resources of Ireland*, 1847, in which he recommended the alteration of such laws as interfered with economic development; and of *The Workhouse as a mode of Relief for Widows and Orphans*, 1855, in which he advocated the boarding-out system and outdoor relief for these classes of the poor.

[*Memoir* by J. K. Ingram, LL.D., unpublished, read before the Statistical and Social Inquiry Society of Ireland.—*Dublin University Calendar*.—*Belfast Queen's College Calendar*.] E. G. P.

HANDICRAFT. See HOME INDUSTRIES.

HANDSAL. See AUNCCEL.

HANSARDS. One of the English names for merchants of the Hanseatic League, EASTERLINGS being the other. Hansard appears as an English surname in 1254. (Mat. Paris, v. 427). R. H.

[The honourable connection of the *Hansard* family of printers with the publication of parliamentary debates need not be commented on here.]

HANSE OF LONDON. This hanse, which had no organic connection with the Hanseatic League, was an association for foreign commerce consisting originally of merchants of Flemish towns. It was established for the promotion and security of trade between Flanders and England. It is a well-known fact that Flanders was dependent upon England for her supply of wool; the *Libell of Englishe Polycye* says—

By draping of oure wolle in substance

Liven her comons, this is her governaunce.

Hence it was natural that a society or league should be formed in Flanders for the protection of her trade with England. As its chief seat or centre of commerce was in London, it was called *hansa Londoniensis*; other names applied to it were *hansa Flandrensis* and "the seventeen towns." Little is known concerning the origin of the association. Though not clearly mentioned before 1240, it seems to have been formed in the second half of the 12th century by seventeen towns of Flanders,—Bruges, Ypres, Lille, Damme, Ardenburg, etc. There is some evidence that a small hanse at Bruges was its original nucleus or starting-point. In the 13th century the number of towns connected with the hanse of London was gradually increased, though the old name, *les dieu-sept villes*, was retained. Bourquetot gives a list of fifty-six such towns, many of which were in Hainault and North France,—Ghent, Douai, Arras, Cambrai, Abbeville, St. Omer, Beauvais, Caen, Troyes, Amiens, Rheims, etc.

The hanse of London had the monopoly of commerce with England. Its officers could seize the property of any of their countrymen of Flanders, not belonging to the society, who undertook to trade in England. Besides exercising this monopoly, the hanse protected its members against dishonest dealings; they

ceased to have commercial intercourse with any Englishman who had been guilty of fraud in selling wares, or who had acted unjustly toward any one of them. They also traded at the great fairs of Champagne (see MEDIEVAL FAIRS); the prosperity of these marts was, in fact, largely dependent upon the hanse of London.

Concerning the organisation of the society, the information furnished by its statutes and by other sources is meagre. Its chief officer, "the count of the hanse," was elected by the merchants of Bruges. He presided over its meetings and courts, and was assisted by the standard-bearer, *scildraec*, who was generally a merchant of Ypres. These two officers also acted as treasurers. The statutes mention, moreover, a clerk, or secretary, and *inventores*, or *arbitri*. The *inventores* were judgment-finders or judges who tried cases falling within the jurisdiction of the hanse; eight of these judicial delegates came from Bruges, four from Ypres, and one or two from each of the other towns of the league.

New members were admitted at Bruges and in England. To gain admittance a person had to pay an entrance fee, the amount of which varied according as the applicant was the son of a member or not. Most artisans and retail dealers were excluded from membership, especially weavers, fullers, shearers, carpenters, shoemakers, wool-beaters, dyers "who dye with their own hands and have blue nails," skinnners "who work with their hands," tinkers "who go crying through the streets," cheesemongers, buttermongers, and all who sell by the pound. Such persons could become members only by renouncing their craft or trade, and then, after waiting a year and a day, by paying a high entrance fee. They were, moreover, required to bring a certificate from their town showing that they had been admitted to its *civitas*, or mercantile brotherhood, on payment of the fee required by the municipal authorities. The hanse was evidently made up mainly of wholesale dealers, though some prosperous craftsmen seem to have obtained admission.

There was a close connection between the hanse and the towns to which its merchants belonged. The higher municipal officers had to be members of the society; and before being admitted into the hanse, a person had to join the mercantile gild of his town. Hence the hanse of London may be regarded as a loose municipal league, as well as a society of merchants.

The count of Flanders seems to have exercised no direct supervision or authority over the hanse; but, in some cases, there was probably an appeal from the decisions of its court to a superior commercial tribunal of Flanders consisting of delegates from five important towns.

The exact date of its dissolution is shrouded

in as much obscurity as that of its creation. It still flourished in 1349. There seem, however, to be no references to it in the second half of the 14th century, and in 1426 the town authorities of Bruges stated that the regulations of the hanse had long been in abeyance. Its period of life thus covered about two hundred years.

[The best account of the hanse of London will be found in Carl Koehne's *Hansgrafenamt*, 1893, pp. 205-245.—See also Bourquelot, *Foires de Champagne*, 1865, vol. i. pp. 134-139.—Varenbergh, *Histoire des Relations diplomatiques entre la Flandre et l'Angleterre*, 1874, pp. 145-155.—Hegel, *Städte und Gilden der germanischen Völker*, 1891, vol. ii. pp. 185-188.—Ashley, *James and Philip van Artevelde*, 1883, pp. 17-20, 141.] c. gr.

HANSE TOWNS. The number of towns which belonged for a longer or shorter time to the Hanseatic League is uncertain, as the merchants carefully abstained from furnishing complete details, and the names must be gleaned from records. In documents which mention a considerable number, the classification is geographical. The treaty, for example, with King Magnus in 1372 (*Recesse*, ii. 45), though it omits the Westphalian towns, ranges the others under the headings: *Civitates Maritimæ; Civitates Liconic, Prussicæ, de Mari Australi* (Zuyder Zee), *Zelandicæ, Hollandicæ, Gelricæ* (Guelders). It is usually stated that the towns in the 14th century were divided into three groups or circles (see *HANSEATIC LEAGUE*, p. 283).

The following list of 115 is founded on one in the *Hansische Geschichtsblätter* for 1871, collated with the Hanseatic map in Prof. Droysen's Historical Atlas and other lists, and the results have also been compared with the names of the towns represented at the various Diets up to 1476. These appear, a few at a time, in the official *Recesse*, and form an absolute test of the right of a town to a place on the roll. Those which are now for the first time added on this authority are marked with an asterisk.

Amsterdam	Elburg	*Kokenhusen
Anklam	Emmerich	Kolberg
*Armenuiden	*Enkhuizen	Köln a. d. Spree
Arnheim	*Fellin	Königsberg
Aschersleben	Frankfurta. d. O.	Kulm
*Barth	Gardelegen	Lemgo
Berlin	Gollnow	*Lemsal
Bielefeld	Goslar	Lippstadt
Bolsward	Göttingen	Loitz
Brandenburg	Greifswald	Lübeck
Braunsberg	Grimmen	Lüneburg
Bremen	Groningen	Magdeburg
Breslau	Guben	Middelburg
Briel	Halberstadt	Minden
Brunswick	Halle	Münster
Buxtehude	Hamelu	Nordheim
Cologne (Köln a. R.)	Hamburg	Nymwegen
Cracow	Hamm	Osnaabrück
Danzig	Hanover	Osterburg
*Denmin	Harderwyk	Osterode
Deventer	Hasselt	Paderborn
Dordrecht	Helmsedt	Pernau
Derpat	Herford	Quedlinburg
Dorward	Hildesheim	Reval
Duisburg	*Hindeloopen	Riga
Elmbeck	Kampen	Roermonde
Elbing	Kiel	Rostock
	Koesfeld	Rügenwalde

Salzwedel	Tangermünde	Wernigerode
Seehausen	Thiel	Wesel
Soest	Thorn	*Wieringen
Soltbomel	Treptow	*Windau
Stade	Tribsees	Wisby
Stargard	Uelzen	Wismar
Stavoren	Unna	*Wolmar
Stendal	Utrecht	Zierixee
Stettin	Venlo	Zutphen
Stolpe	Warburg	Zwölle
Stralsund	*Wenden	

Kneiphof, though only one of the quarters of Königsberg, was separately represented at more than one diet at which a representative of Königsberg was also present. It cannot, however, be included in a list of towns.

Official documents give good reason for believing that the following were also Hanse Towns:

Erfurt	Kalmar	Pritzwalk
Greiffenberg	Kyritz	Werben
Havelberg	Nordhausen	
Höxter	Perleberg	

Many other towns are mentioned in the *Recesse* in a way which shows that they were in some degree connected with the Hansa; but it is not possible to give a satisfactory list of them.

The *Kontor* towns were:

Bergen	Bruges	London	Novgorod
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To these may be added the following, in which the Hansa either had smaller factories or special privileges:

Antwerp	Helsingborg	Roeskilde
Ardenburg	Helsingör	Skanör
Boston	Full	Stockholm
Bristol	Ipswich	Sveudborg
Copenhagen	Kowno	Warberg (Sweden)
Danmæ	Lisbon	Yarmouth
Dinant	Lynn	York
Falsterbo	Malmö	Ypres
Flensburg	Norwich	
Ghent	Pleskow	

This list could be much extended, but the question of inclusion or exclusion is one of degree, as the league had dealings far and wide. R. H.

HANSEATIC LEAGUE. An association of German towns which, during the 13th and 14th centuries, secured the entire trade of the countries surrounding the Baltic, exporting their produce to Germany, England, and the marts of western Europe, and carrying back the manufactured goods of the west and the special products of warmer climates.

The word *hanse* is of Mæso-Gothic origin, and denotes an association of a militant character; it also appears in early documents in the sense of a payment (*Hans. Urk.*, i. No. 33). In 1266 the Hamburg merchants were allowed to have *hansam suam . . . per totum regnum* by Henry III.; but the expression *mercatores de hanse Almania* first occurs as a designation of the famous league in the agreement of June 1282 with the city of London, now in the archives of Lübeck.

Monopoly was the watchword of the Hanseatics from beginning to end of their career; but while their policy enabled them, in the infancy of the European nations, to amass wealth and gain power, their blind adherence to the same aims and methods in face of the

discoveries, new economic views, and developed political life of the 16th century, led to the final destruction of their organisation.

No date can be assigned for the first beginnings of the Hansa. No charter or treaty exists to which historians can point as a foundation statute until the year 1367, though, as the Hansa had at that date become the political arbiter of northern Europe, the deficiency is not due to the absence of strong bonds of association at a much earlier period.

There were anomalies in the position of the Hansa. As a power it treated on even terms with princes; it was also a secret society. On paper it was the obsequious servant of the German emperor; but, conscious of the weakness of the central authority, then wasting its strength in Italy, the league never condescended to obey the imperial decrees, and indeed was itself a standing contravention of the Golden Bull of 1356, which forbade all such associations. It could raise fleets and armies—one of twelve thousand men is spoken of—and levy large war-contributions, but it never permitted a complete list to be given of the towns which it included. It sufficed that the Hansa should know its own aims and methods, and it was best that its outlying members should not be too surely recognised by those who held them individually in their power. The Hansa assumed an absolute sway over its members, beheading the four burgomasters of Halberstadt in 1425 (*Contin. Chron. Engelhus.*, Leibnitz, ii. p. 84), and almost ruining those towns which, like Brunswick in 1375 (*Recessus*, ii. No. 93), were for a time expelled; or, like Bremen in 1285 (*Rec.*, i. 34, § 2), unhansed themselves; yet it had no visible executive.

Some of the earliest traces of that which was destined to become the Hansa are found in England, though in reality the league sprang from two centres of growth—the Cologne trade with England and the Lübeck trade with the Baltic.

The calling of a merchant in the 13th and earlier centuries required physical courage and endurance. Mediæval traders travelled with their goods, and were regarded, in foreign countries, with a jealousy largely due to their persistent attempts to work outside the towns and enter into direct commercial communication with producers, thus carrying away with them the profits which, had they traded under municipal restrictions, would have accrued to the native merchant. This was not only an English feeling; its counterpart was found abroad, and it was a cardinal point in the policy of the Hansa to enforce far stricter limitations on English merchants on the continent than those which, in spite of the *Carta Mercatoria* of 1303, were imposed on ordinary foreign merchants in England up to the middle of the 14th century. Partnerships between foreign merchants and its own members were absolutely forbidden by the Hansa, and the celibacy to which the

Kontor and factory agents were bound was intended to prevent the growth of family agencies.

Usually a foreign merchant had to pay much higher customs dues than a native. He had to buy, or combine to buy, from rulers the right to travel anywhere, and sell in any market; and when, as in the case of the Hansa, these privileges were obtained, he became the hated rival of the native trader, who gladly enforced, when possible, the rough justice of reprisal then in vogue. This system is conveniently illustrated by the letter from Stralsund in the *Litteræ Cantuarienses* (Rolls Series, iii. 91), and it will be seen that if a previous merchant, from the same place as the trader himself, had proved a defaulter, or his own city or country had ill-treated merchants of the kingdom he was visiting, his goods or his person might be seized in compensation. Again the roads were not infested by ordinary robbers only, for a duke of Brunswick could condescend to plunder merchants so shamelessly as to force the league to vengeance (*Chron. S. Egid.*, Leibnitz, iii. 598); and local magnates exacted so many tolls (see INTERNAL CUSTOMS AND TOLLS) that a Hanseatic merchant, travelling from Thorn to Lemberg, a distance of perhaps 360 miles, was forced to pay tolls sixteen times, the toll per horse amounting to over 31 groats (*Hans. Urk.*, iii. 312).

To these vexations were added the natural perils of the sea and the brutality of pirates and wreckers, for so barbarous were the times that a prince, while agreeing to protect merchants from other plunderers, could stipulate for a share of stranded cargoes for himself.

There must have been heavy profits to induce men to run such risks, and it was but natural that they should seek by combination to make these profits more secure, and obtain comfort and mutual assistance when, as frequently happened, they were compelled to winter far from home. These combinations abroad, among men whose temporary sojourn at a distance in no way impaired their ties of citizenship, led to federations at home between the towns, in which the merchant class was then the controlling element. This was a foregone conclusion, for, during the period of the rise of the Hansa, there was no national commerce in Europe; towns everywhere dealt with other towns, and merchants having the same aims and methods tended to frequent the same spheres of activity.

Traces have come down from remote times of a great trade in the Baltic before the 11th century. In 975, for example, Otto II. granted a charter to Magdeburg (*Hans. Urk.*, No. 1), which, by referring to the wanderings of German merchants into barbarous countries, clearly alludes to Russia and the North; and Adam of Bremen, in the 11th century, mentions that the now-vanished city of Julin, or Jumne, was *mercibus omnium Septentrionalium nationum locuples* (Pertz, viii. 312. ll. 15, 22). In Gothland, too, coins of so many Anglo-Saxon kings have been found that the collection made thence is the second best in Europe; and mingled with these tokens of western trade are coins of the caliphs of more than a thousand different types, testifying to the constant communications with the East by the

Caspian Sea, by the Volga, and the other great rivers of Russia. Gothland, and Wisby its chief town, had thus long been marked out as the central depôt of Baltic produce, and in 1163, but five years after the second foundation of Lübeck, we find a rescript of Henry the Lion (*Lüb. Urk.*, p. 4) respecting the behaviour of the natives and the Lübeckers settled in Gothland; while in 1199 Germans and Gothlanders were allowed free commercial access to the principality of Novgorod, which stretched in a north-easterly direction along the Baltic and the frontier of Sweden. Their trade was largely in herrings, which, from the beginning of the 12th century up to the middle of the 16th, seldom failed to drive in shoals through the Sound to spawn in the Baltic; and a hook of land, jutting out from Scania into the Sound, was then the place at which the fish could be best intercepted. There, accordingly, on Danish soil at Skanör and Falsterbo, the Lübeckers had their *vitte*, or curing establishments, under privileges granted before 1209 by Waldemar II. of Denmark (*Lüb. Urk.*, p. 20). Matthew Paris, however, notes, under the year 1238, that the Gothlanders and Frisians were in the habit of coming each year to Yarmouth to buy herrings (iii. p. 488).

The early Lübeck records contain few traces of other Hanse towns; but in 1225 there are incidental references to the *Lubecenses*, *Hamburgenses et ceteri . . . mercatores . . . Duciam frequentare volentes*, to assistance given to certain princes in war, to an agreement with Hamburg in 1226 as to mutual privileges, and to the freedom from tolls granted to men of the Baltic shore in the Lübeck customs tariff (*Lüb. Urk.*, pp. 35-38).

The charter conferring mint privileges and the freedom of the empire on Lübeck in 1226 (*ib.* p. 45) refers to merchants trading thence to England, and frees them from the tolls exacted by Cologne and Thiel; but the records are strangely reticent, and under the year 1227, when the *Lubecenses* defeated the Danes at Bornhöved (Langebek, i. 122, 286), there is no Lübeck document clearly alluding to the war except an agreement with Riga and the Germans in Livonia not to make a separate peace. In the *Hansisches Urkundenbuch* (i. 232, 303, 345, 650) are documents of 1229 and later dates which seem to presuppose a league, but though the record evidence is not distinct, the existence of a far-reaching bond of union is apparent from public results of most decided character.

In 1249 it is recorded that Eric VI. of Denmark assailed the *Lubecenses in Scania piscantes* (Langebek, i. 123), and that in revenge they burned Copenhagen. Still no mention of other towns is made by the chronicler; but in 1285 the annalist of the Franciscans of Wisby (Langebek, i. 255) notes that there was war *inter Noricos et Lubycenses ac alias civitates maritimas* which was concluded by the peace of Kalmar; and the chronicler thus uses the actual official title of the Hansa, whose common

seal bore the legend: *Signum civitatum maritimarum*. His words are interpreted by the record of the arbitration in the *Hansisches Urkundenbuch* (i. 993), and by the *Annales Lubicensis* (Pertz, xvi. 411-429) which mention, under 1285, Lübeck, Wismar, Rostock, Stralsund, Greifswald, Riga, Wisby, and two Netherland towns, Kampen and Staveren, as those concerned.

The same annals show, under the year 1310, an association between Greifswald, Stralsund, Rostock, and Wismar, which Lübeck declined to join (*Hans. Urk.*, ii. No. 175); and the northern chronicles (Langebek, vi. 222; i. 258) mention the burning of Helsingør and Skanör by the *civitates stagnales*, or Hanse towns, in 1312, and the siege of Stralsund in 1316. They then proceed to give weary evidence of smouldering warfare up to 1361, when Waldemar III. of Denmark began an attack on the league which really led to its final organisation. At this date the merchants had a very long seaboard open to attack, for they had followed in the wake of the Teutonic knights, and had founded fourteen cities along the Baltic shore as far as Reval and a great factory farther away at Novgorod, so that the time had visibly come for firmly banding together all who had a common aim.

Turning now to the western half of Europe, the Laws of Æthelred (A.D. 978-1016) show the *homines imperatoris* coming to England in their own ships and enjoying special privileges; and William of Malmesbury, writing before 1142, describes London as being crowded with German merchants (*De Gest. Pont.*, ii. § 1). In 1157, too, there is a charter of Henry II. referring to the *gildhalla* of the Cologne merchants in London, followed by Richard's charter given to the same merchants at Louvain in 1194 (*Hans. Urk.*, i. 14, 40); but probably the earliest direct evidence of a western league is furnished by the charter of 1252 granted to the merchants of Cologne, Dortmund, Soest, and Münster *et aliis cum iisdem concordantibus* (*Hans. Urk.*, i. 428). The history of this branch of the Hansa is intimately connected with the history of English commerce (see STELLYARD), though it is certain that the Baltic merchants were also in constant communication with London, Lynn, and the eastern ports. The Cologne or Westphalian association presents, however, few historical features of interest until the eventful year in which, as stated above, the great war with Denmark began. Waldemar III., who had long endeavoured to free his kingdom from foreign influences, struck, in 1361, a treacherous blow at the league by sacking the town of Wisby in time of peace (Langebek, i. 259). At once negotiating an alliance with Norway, the merchants laid a tax on all the exported goods of their league, equipped a fleet, and plundered

Copenhagen. They were besieging Helsingborg when Waldemar, surprising their ships, compelled them to retreat (*Recesse*, i. 374, § 10). Negotiations followed, but the war broke out again, and on the 11th of November 1367, a general council of seventy-seven towns was held in Cologne, at which the *muncii civitatum de Hanza Theotonica* (*Recesse*, i. 412, 416) drew up the Act of the Cologne Confederation, which was thenceforward regarded as the foundation-statute of the avowed Hanseatic League.

It was to these deputies (Langebek, vi. 228) that king Waldemar addressed his mocking quatrain beginning,

Seuen und Seuentigh Hensen
Hefft seuen und seuentigh Gensen.

But in the year following they had driven Waldemar from Denmark, and the peace of Stralsund was concluded in 1370 during his banishment (*Recesse*, i. 523). By it the Hansa obtained for fifteen years the castles and the bulk of the revenues of Scania, freedom from all tolls in the Sound, and a control over the succession to the Danish crown (*Rec.*, i. 524, l. 33).

This great change in the position of the Hansa was marked by a state visit in 1375 of the emperor Charles IV. to Lübeck as the chief of the confederated towns. He sought political aid in vain from the new power, which had reached its highest level, but he was loaded with gifts instead.

The extant records of the league now begin to assume a different character. The series of minutes of diets begin with those of the Wismar diet about 1260. These early *Recesse* must not, however, be supposed to relate to the league as a whole. No general assembly is known to have taken place before that in 1367, referred to above, and it is certain that small associations of towns sometimes took separate action (Pertz, xvi. 421). The early series of *Recesse* is broken, being not continuous until about 1364; but neither then, nor afterwards do the records reveal any standing council or high officials, though such may have existed, for the chronicle in Langebek (v. 235) states that in 1428 the *communitas urbium* rebelled and created for themselves *noyem concilium et senatum*. Another sign of organisation, not connected with the filiation of towns, is observable in the earliest *Recesse*, which refers to statutes made for the benefit of all merchants *qui jure Lubicensi gaudent et reguntur*. When they became annual these diets were frequently held at Lübeck, then admittedly the leading city, and one of its burgomasters usually presided.

The correspondence, the treaties, and the *Recesse* themselves disclose the names of the Hanse towns a few at a time (see HANSE TOWNS). It is usually stated that they were divided into three groups. Lübeck leading the Wendish, Pomeranian, and Saxon towns; Wisby the Gothland and Livonian; and Cologne the Westphalian; but a document of 1366 (*Rec.*, i. 381) shows a *terciana Lubicensis*, a *terciana Wisbicensis*, and a *terciana* consisting

of Prussian towns. Certainly Cologne formed a fourth *terciana*, so the word cannot be taken in its ordinary sense. The truer classification is perhaps shown by a letter of 1372 (*Rec.*, ii. 45), though it omits Cologne. At a later date Lübeck, Brunswick, Danzig, and Cologne were leaders of regions or circles. For a time Wisby had held a great position in the Baltic, and the dues from the Hanse towns were paid into a common treasury chest there under the care of four aldermen from Wisby, Lübeck, Soest, and Dortmund; but after the sacking of Wisby in 1361, every sign of leadership passed to Lübeck. In the 14th century Lübeck began to coin gold, twenty shillings of twelve groats each being equal to one easterling pound (see EASTERLINGS), and a large banking business sprang up there, bills of exchange being generally payable at Lübeck or at Bruges.

The lists of towns attending these diets reveal the broad fact that the coast towns from Reval to Middelburg were the really active members of the Hansa, and on them fell the brunt of fighting and negotiation. Even after 1367, Cologne, proudly reluctant to cede precedence to Lübeck, seldom sent representatives, while the rest of the inland towns were almost equally backward. Sometimes the diet, in fixing a place for the next meeting, would require towns to send their deputies to answer complaints; but often only those of four or five seaports appeared, though at crises the list became much longer.

The business of the diets was varied. Fines were received from recalcitrant members; letters were written to foreign princes demanding redress for merchants; questions of peace and war and of alliances had to be decided, war expenses apportioned, old privileges maintained, and others won by negotiation. Laws, too, were made touching commercial conduct, and even the morals of the merchants (*Recesse*, i. 9). Letters on these matters may be read in the Lübeck *Recesse* of 1366 (i. 376); and it may be remarked that these documents have a special interest in connection with the growth of the LAW MERCHANT (*q.v.*). The trade of the Easterlings was not speculative. Transactions were settled by barter or by cash payments on the transfer of actual commodities, and credit was almost entirely prohibited. Resolute selfishness marks all the acts and writings of the Hansa. It had fixed aims which it pursued untiringly, the chief being to gain absolute control over the Belt and the Sound. The league's desire was that no ship but a Hanseatic ship should pass in or out of the Baltic, or trade anywhere in that sea; and, broadly speaking, the will of the Hansa prevailed up to the beginning of the 16th century, though the English ADVENTURERS, MERCHANTS could not be wholly shut out. So jealously guarded was this region that the early cartographers, who could delineate Africa and show the position of Japan, had to rely on the Ptolemy maps for Europe above N. lat. 53°. This policy of exclusion proved, of course, unendurable to Sweden and Denmark; and with the latter power, which held the Sound, the Hansa was involved in many wars.

About 115 towns were, at one time or another, included in the Hansa and the position of a few

more is uncertain. It had four great *Kontore* or organised establishments, Novgorod, Bruges, London, and Bergen, and about twenty-eight factories in foreign countries which enjoyed special privileges.

These *comptoirs*, of which the STEELYARD was the most important, differed somewhat according to the nature of the countries in which they were established. The one at Novgorod formed a separate quarter of the town, clustered round a church. Here the merchants lived, as they sought to do everywhere, under their own *Sera* or code of laws (*Lüb. Urk.*, i. p. 700), and maintained a celibate establishment under an elected alderman—a kind of merchant abbot over a commercial monastery, which, like some other early monasteries, had also the characteristics of a fortress. At Bergen about 8000 persons thus lived together in one community, though subdivided according to the towns they represented. By unscrupulous methods they ousted the Norwegians from the whole of the harbour, and even limited the number of Hanse cities which should share the trade. The expenses of these factories were paid mainly by duties on ships; but each town defrayed the cost of the maintenance of its own staff. In all the *Kontor* towns the Hansa had gained great privileges in the way of remission of customs dues. Even as late as the 29th year of Henry VIII., the Hansards were so favoured that, for instance, they exported 33,778 pieces of cloth as against 4603 by other foreign merchants; whereas in 31 Henry VIII., when the latter were allowed to pay "Englische custome" only, the totals were 27,260 for the Hansa, and 24,566 for the others (*Cott. MS.*, Claud. E. vii. f. 99).

Notwithstanding fierce quarrels with Denmark, the Hansa obtained thence grain and cattle; and the merchants derived from their own curing establishments on Danish soil in Scania the herrings which they carried to Germany and western Europe. From Sweden the Hansa exported wood, furs, iron, copper, fish, cattle, and corn; importing, among other things, silk stuffs, cotton, hops, salt, spices, and wines. Until the days of Gustavus Vasa, the entire trade of the country was in the hands of the league; and the same may be said of the Russian trade, until the early part of the 16th century, when Ivan the Terrible sacked Novgorod. Even after that, the Hansa sought to revive the monopoly; but the English, the Netherlands, and the Danes had forced themselves into the Russian trade, and could not be driven out again. While their advantage lasted, the Hansa had exported from Russia furs, leather, wax, honey, tallow, hair, gold, and silver; bringing for Russian use, corn, flour, smoked meats, herrings, beer, wine, Dutch and English cloth, thread, furriery and mercery, copper, zinc, and lead. In Norway, the Hansa had swooped down on the long-established trade of Bergen with Greenland, Iceland, and the Arctic seas, and thrusting aside the natives, had taken to itself, as far as English enterprise allowed, the entire produce of the whale and seal fisheries, the furs, tallow, cod, herrings, and other products of the north. Western and southern Europe formed the opposite pole of the Hanseatic trade, and all the produce of the north and east which was not

absorbed in Germany came by sea to Bruges or to London (see STEELYARD). In Bruges, the Hansa merchants met the produce and manufactures of England, Flanders, Spain, Italy, the Levant, and the East, and transacted business with men of all nations. The customs tariff of Bruges in 1380, recorded in the archives of Hamburg (*Rec.*, ii. 209), shows that the following were the less ordinary articles of commerce which the Easterlings might obtain at Bruges to carry back to the Baltic:—alum, sulphur, tartar, saltpetre, borax, zedoary, saffron, cubebs, rhubarb, tansy; silver, tin, quicksilver, verdigris, vermilion, lapis-lazuli, indigo; almonds, liquorice, caraway, anise, pepper, long pepper, ginger, grains of paradise, cinnamon, nutmegs, cloves, mace, cardamoms, rice, loaf sugar, figs, dates, raisins; Spanish wax, boxwood, frankincense, cotton, and paper. A tariff of 1252 shows swords, shields, armour, copper utensils, boots, cork floats, cloth of many kinds, wood, linen, beer, wine, peltry, and other goods useful in countries like Norway, Sweden, and Russia, which then had absolutely no manufactures of any kind.

Similar information may be obtained from the inventories of the cargoes of two ships, one of which belonged to Thorn. It contained a surprising amount of gold and silver, and some silk (*Hans. Urk.*, iii. 63, 260).

Such was the power of the Hansa, that it compelled all ships, except those bound for England or the Baltic, to stop at Bruges; thus obtaining the chance of being the first buyers of any coveted product. But this prosperity was too great to last. Late in the 15th century, the insolence of the men of Bruges had brought ruin on their own city, and the Hansa, when too late, transferred its factory to Antwerp, only however to find there failure and disappointment.

With France, the league had comparatively little direct dealing. A large part of the French coast was for long periods in English hands; France had, through Marseilles and other southern ports, direct access to the vast trading centres of the Mediterranean; her northern boundaries ran close to the great Flemish towns; and finally, during the 13th and much of the 14th centuries, Amiens, Rheims, Caen, Beauvais, and other towns were included in the HANSE OF LONDON, and had little inducement to join the league.

At Lisbon, the league had a factory through which it obtained Levantine and Oriental goods; but the principal part of the trade with the Italian cities passed overland to Augsburg, Nuremberg, Ulm, and other south German cities which formed a collateral Hansa, and had a factory at Venice.

The great trade with England was mainly concentrated in London; though there were establishments also at Bristol, Ipswich, Yarmouth, Norwich, Hull, and York, and Hanse houses at Boston and Lynn (see Lappenberg's *History of the Steelyard*). Roll No. 268 in the *Miscellanen of the Eschequer* at the Public Record Office, is the account of the customs dues at Lynn for 1286-87, and shows a duty of 6s. 8d. on each sack of wool weighing 2 cwts. Hides and leather were likewise exported. In the roll for 1302, cotton thread, silk, sugar, and spices appear among imports; while cloth, dyed and undyed, was exported by the Easterlings, though

there was direct English trade with Norway as well. Of trade with Scotland there are many traces in the *Recesse* and in the *Nuremberg Chronicle*. An interesting letter of invitation to traders from Sir William Wallace, in 1297, is preserved in the archives of Lübeck.

The Hansa did not remain long at the high level of prosperity attained in the second half of the 14th century. The end of the first quarter of the 15th saw the beginning of the decline. The Hansa had grown into a league at a period when Europe generally contained a servile population, no middle class, except in the towns, and few manufactures; but the feudal and the manorial systems had both collapsed in England; the new race of tenant farmers had appeared in the country; and a manufacturing population controlled by craft guilds (see CORPORATIONS OF ARTS AND TRADES; GILDS), had sprung up in the towns; meanwhile the nation, unified by parliamentary representation, was fast developing a national policy as regards trade, and awakening to a consciousness of vigour and of resources which it could not allow to be controlled by a selfish company of foreigners.

Changes had also been taking place all over Europe; even in the Baltic the trade created by the Hansa had been elevating the once simple races. Unseen natural forces, too, were joined against the merchants, and the herrings, which had been perhaps their greatest source of wealth had begun to change their annual course, to the lasting benefit of the Netherlands.

Europe began to see that the Easterlings, or *Ostrelins*, as the French called them, were little more than mere carriers of products, representing neither industrial population nor manufacturing centres. The western and northern nations began to insist on not being excluded any longer from direct trading relations with each other; yet to threaten the monopoly of the Hansa was still to bring the sword of the confederated cities from its scabbard, and offenders found themselves confronted either by open war, by secretly encouraged raids of pirates, or by the disfavour of sovereigns whom Hanseatic bribes and loans had won over in spite of their better judgment. The once peaceful Hansa now appeared as a tyrant desperately endeavouring to keep up an effete system of privileges and monopolies by threats and violence. The Dutch, once members of the Hansa, had had a fierce war with Lübeck in 1438, and again seceded from the league at the end of the 15th century, boldly coming forward as its commercial opponents. They soon developed such a trade that it was a fleet of no less than 250 sail upon which the Lübeckers fell in 1511 as it was leaving the Baltic; and when at the opening of the 16th century, Charles V. found himself at the head of an empire with larger interests than those of the Hansa, he wisely favoured the energetic Netherlands, and looked coldly on the allied cities so threateningly independent of his power.

The discovery of America, and of the new passage to the East Indies round the Cape, had begun to draw trade into other channels; while the printing press, which quickly found its way to Sweden and Denmark, was undermining a power largely dependent on the ignorance of the

nations it traded with. The Hansa, in fact, was bound to give way in the presence of an altered world; but it declined to do so, and blindly refused to change its ideas and methods.

Within the league, too, there was dissension, and the inland towns began to find that their interests no longer coincided with those of the coast towns, whose carrying trade was beginning to slip away.

Reverting, however, to the chronological series of events, the annals show that for many years after the conclusion of the peace of Stralsund, in 1370, the Hansa was in an almost continuous state of warfare. First the piratical *Vitalienbrüder* had to be suppressed (*Recesse*, iv. 279, 330, etc.), a work not ended until 1402; then a long and bloody war ensued with Eric the Pomeranian, ruler of the three Scandinavian countries, lasting up to 1435. Five-and-thirty years afterwards the Hansa, at variance since 1452 with the English, was, as Philip de Commines states, at war both with England and France, and came nigh to changing the course of English history by the capture of Edward IV. at sea off Alkmar. The war was concluded by the peace of Utrecht in February 1474, which restored to the Hansards all their privileges in England, and delusively promised reciprocity to the English merchants in the league towns. Cologne had taken the side of England in these quarrels, and had seceded from the Hansa, but was re-admitted in 1476 (*Fœdera*, xii. 36).

A war in 1518, between Christian II. of Denmark and Sweden, which enabled the merchants to play once more the part of king-makers, proved disastrous to them; for Frederick and Gustavus Vasa, to whom they had given thrones, identified themselves with the interests of their newly-gained kingdoms, and with splendid ingratitude determined to break the power of the Hansa. The war which ensued is connected with the spread of Lutheran doctrines, and with the endeavours of Jürgen Wullenweber of Lübeck to gain actual possession of the Sound. He failed, and the outcome of the war in 1534 was the total loss of Scania to the Hansa.

The three Scandinavian nations were now able to trade openly on their own account, while the voyage of Richard Chancellor to Archangel in 1553, and the establishment in England of the RUSSIA COMPANY, turned the flank of the Hanseatic trade with Russia. Other heavy blows, too, now fell on the league. The Czar, Ivan IV., saw that the time was ripe for a descent on Livonia, and no effective resistance being made either by the Teutonic knights or by the Hansa, the country was divided in 1561 between Russia, Sweden, and Poland.

Soon afterwards Lübeck, allying herself with Denmark, entered on a protracted war against Sweden, only ended in 1570. No benefit

accrued from these exhausting efforts; the seizure of Bornholm by the Danes, a serious loss to the league, followed in 1576. A worse event happened when, after a lengthy quarrel with the Hansa respecting its failure to carry out the provisions of the treaty of Utrecht, Queen Elizabeth answered the Emperor Rudolph's expulsion of the Merchant Adventurers in 1597 by closing the Steelyard in February 1598. A naval power that had beaten the Armada, could not be excluded from any sea or from any market; it was indeed wonderful that the Hansa had maintained its ground so long in face of the Mercantilist ideas then dominant in England (see MERCANTILE SYSTEM).

In 1586 the Czar Feodor Ivanovitch restored the factories of Novgorod and Pleskow, but the Swedes and the Poles, no less than the English, Danes, and Netherlanders, interfered with the trade; and when in 1603 the Czar Boris refused to recognise any Hanseatic town except Lübeck, internal dissensions were added to the difficulties which the Baltic powers threw in the way of the league.

In no quarter of Europe was there any ray of hope for the now obsolete Hansa; and, when the Thirty Years' War began, dissolution came with it very speedily, and the material prosperity of Germany, the results of the laborious industry of her merchants, was entirely lost.

The last minutes of a diet are of that in 1628, though another was held in 1630; and after the peace of Westphalia, in 1648, only Lübeck, Bremen, and Hamburg remained to make an unsuccessful effort to revive the league. A number of deputies met in 1669, but dispersed again without having effected anything. The three great cities, as free cities, were recognised by the treaty of Vienna in 1815, and as free cities and sovereign states now form part of the German Empire.

[*Urkundenbuch der Stadt Lübeck*, 8 vols., 1843-1889.—*Hansische Geschichtsblätter*, Leipsic.—*Hansische Geschichtsquellen*.—Verein für Hansische Geschichte, Lübeck, *Hanserecesse*, 1256-1476 (quoted as *Recesse*), 13 vols., 1876-92.—C. Höhlbaum, *Hansisches Urkundenbuch*, 3 vols.—J. M. Lappenbergh, *Urkundliche Geschichte des Hanseatischen Stahlhofes zu London*, Hamburg, 1851.—Calendar of State Papers (foreign series).—Lungebek, *Scriptores Rerum Danicarum*, 1786.—Leibnitz, *Scriptores Rerum Brunsvicensium*.—Pertz, *Monumenta Germaniæ Historica*.—Rymer, *Fœdera*, viii.-xii.—A. Krantz, *Chronica Regn. Aquilon.* 1562.—J. A. Werdenhagen, *De Rebus-publicis Hanseaticis*, Frankfort, 1641.—Macpherson, *Annals of Commerce*, 1805.—Sartorius von Waltershausen, *Urkundliche Geschichte des Ursprunges der deutschen Hanse*, ed. Lappenbergh—D. Schäfer, *Die Hansestädte und König Waldemar*, 1879.—E. Worms, *Histoire Commerciale de la Ligue Hanseatique*, 1864.—H. Zimmern, *The Hansa Towns* (The Story of the Nations Series), 1889.—J. de la Gravière, *Les Marins du XVe.*

siècle, 1879.—Article on "Hanseatic League," R. Lodge, *Encyc. Brit.*, ed. ix.] R. H.

HANWAY, JONAS (1712-1786), was a merchant and philanthropist. Apprenticed at Lisbon, he began his mercantile life there, but soon returned to London, and in 1743 went to St. Petersburg, where he entered into partnership with an English merchant, and was commissioned by the Russia Company to carry on the attempt begun by John Elton to establish a British trade in wool in Persia and on the Caspian Sea. After more than a year of strenuous effort and perilous adventure he returned to St. Petersburg; the new trade did not prosper, mainly on account of Elton's behaviour. In 1750 Hanway left Russia and began a life of active benevolence in London, where he was the first man to use an umbrella, a chief promoter of the Marine Society, of the Magdalen Hospital, of plans for benefiting chimney-sweepers, for paving the streets, for reforming the Foundling Hospital, for establishing Sunday schools, and, above all, for preserving the lives of "parish infants," among whom the mortality was then extraordinarily high. In 1762, at the instance of some London citizens, he was appointed a commissioner of the victualling office, in recognition of his public usefulness.

Hanway's writings, seventy-four in number, chiefly occasioned by his philanthropic schemes, are, like his work, miscellaneous and humane. Only the following need be mentioned:—*The Essay on Tea*, known through Dr. Johnson's review of it.—*Historical Account of the British Trade over the Caspian Sea*, etc., to which is appended *The Revolutions of Persia*, a detailed and interesting account of his travels and observations, and *Letters on the Importance of the Rising Generation of the labouring part of our fellow-subjects*, containing plans for increasing the population by preserving infant life, with some account of the London death-rate and an estimate of the expectation of life at different ages.

[Pugh's *Remarkable Occurrences in the Life of Jonas Hanway, Esq.*, 1787 (abridged in 1798).—*Gentleman's Magazine*, 1786, p. 812.—*Dict. of National Biography*.] E. G. P.

HARCOURT, FRANÇOIS EUGÈNE GABRIEL, Duke of (1786-1865), was from his youth a steady and brilliant champion of liberalism under its different shapes, and the defender of the Greek and Polish national causes. He became a member of the French house of deputies, and of the house of peers (from 1837); he was also sent as French ambassador to Madrid (1831), shortly afterwards to Constantinople, and in 1848 to Rome, where he succeeded Rossi. In 1849 he resigned the latter embassy, and lived in retirement on his estates until his death.

In 1846, he accepted the presidency of the *Association pour la Liberté des Echanges*, with Bastiat as secretary; his *Discours en faveur de la Liberté du Commerce* (in the French parliament) were published 1846, in Paris. He insists mainly on the argument that private interests

ought never to be privileged at the expense of the general welfare, and that free competition is the only available method to secure this end. E. Ca.

HARD - DOLLAR (or *peso duro*). Old Spanish silver coin.

Year.	Weight.		Finess.	Value.	
	grains.	grammes.		In silver 925 fine at 5s. 6d. an oz.	In standard silver francs 900 fine.
1707-1728	423.89	27.468	930.50	s. d.	francs.
1728-1772	417.74	27.064	909.72	4 10½	5.68
1772 ¹			902.78	4 8½	5.47
1848	405.75	26.291	900.00	4 8	5.43
1850	402.87	26.105		4 6½	5.26
1854-63	400.64	25.960		4 6	5.22
				4 5½	5.19

The subdivisions were all of proportionate weight and fineness until the year 1864, when the escudo (or half-duro) only was of the same fineness, the other fractional coins becoming merely tokens of the fineness of 810, though retaining weights proportionate to the dollar.

In 1868 the coinage of pesetas (francs) was commenced in Spain, and has since been continued.

F. E. A.

HARD MONEY. This term is locally applied in the United States to metallic money as distinguished from paper issues. The advocates of hard money are in general opposed to the **SOFT MONEY** or **Greenback** party. The term came into frequent use during the political discussions in the decade 1870-80, in favour of the resumption of specie payments. D. R. D.

HARDENBERG, KARL AUGUST, Prinz von (1750-1822), an eminent Prussian statesman, was born at Essenrode in Brunswick-Lüneburg. He belonged to an old Hanoverian family. In 1766 he went to the university of Göttingen, and in 1768 to that of Leipzig,—in the latter making the acquaintance of Goethe. Returning to Göttingen, he there pursued the study of jurisprudence; and in 1770 entered the civil service of Hanover. In the course of some travels in Germany in 1772-73 he stayed for a time in the house of the Freiherr von Stein, father of his future colleague. He conceived an affection for a daughter of the family, but by the influence of his relatives was led to marry, in 1775, a Countess von Reventlow, who by her subsequent conduct ruined his domestic life. During a residence in England in the neighbourhood of Windsor in 1781 he discovered a liaison of his wife with the Prince of Wales which had already created a good deal of public scandal; he quitted, in consequence, the Hanoverian service, and entered, in the following year, that of the Duke of Brunswick. In 1787 he divorced his wife, and married another who seems to have been little more reputable. The Margrave of Ansbach and Bayreuth, who belonged to the house of Hohenzollern, being soon after desirous of

¹ Same as the Mexican dollar.

getting rid of his principal ministers, asked the king of Prussia to send him new advisers; and amongst these Hardenberg was appointed. The Margrave, weary of the task of governing, resolved before long to abdicate in favour of Prussia, to which power on his death his territories were to fall; and thus Hardenberg, in 1791, became a Prussian official, and was charged with the entire administration of the two provinces,—which he conducted with great ability. He was employed in 1795 to negotiate with France the treaty of Basel, by which the apparently prudent, but ignoble and ultimately disastrous, neutrality of Prussia was established. From this time his biography is inseparably bound up with the political history of Prussia. He was a member of the supreme finance directory, and during the frequent absences of Haugwitz from Berlin took his place in the conduct of foreign affairs, though the policies of the two ministers were different—Haugwitz favouring subservieny to Napoleon, and Hardenberg advising close relations with Russia and hostility to France. Haugwitz had to resign office in 1806, and was succeeded as foreign minister by Zastrow. The latter retired in February 1807, and after a time Hardenberg took his place, with a kind of dictatorial position. He already saw that a radical reform of the Prussian state was necessary—in fact, a revolution like the French, but one to be effected by peaceful means. At the darkest hour of the reign of Frederick William III. he said, "The question now is of discovering additional resources to save ourselves; later it will be of a thorough regeneration." But he was soon compelled to quit office. Napoleon, finding in him an obstacle to his designs, after the battle of Friedland insisted on his removal, which the king was not in a position to refuse; and accordingly on the eve of the peace of Tilsit he retired to Riga; and Stein, who had been dismissed some months before, was recalled and entrusted, as Hardenberg had been, with a sort of dictatorship. At Riga, whither he was accompanied by Altenstein and Niebuhr, Hardenberg drew up a memoir on the reorganisation of the Prussian state, which is sometimes spoken of, though not very appropriately, as his political testament. In this memorable document he distinctly indicates, and even insists on, all the measures afterwards embodied in what is known as the Stein-Hardenberg legislation (which will be found described in detail in the article on STEIN); and also suggests the abolition of guilds and a movement in the direction of a representative constitution. These measures were, of course, not devised by Hardenberg alone: they were partly the fruit of the matured convictions of the ablest German thinkers, who had converted the great majority of the nation to similar views, and were directly the result

of the deliberations of the Immediate Commission formed during Hardenberg's tenure of office, of which Altenstein, Schön, Niebuhr, and Stägemann were members. But he cordially adopted the plan—to which he had probably himself largely contributed,—supported it with all the weight of his influence, and loyally urged upon the king the necessity of confiding in Stein as the man most able to deal with the crisis.

When Stein, denounced and proscribed by Napoleon, was forced to leave Prussia, Hardenberg returned to office (June 1810), with the title of chancellor of state; and this position he held to the end of his life. He continued the work of social and economic reform which had been done under the leadership of Stein; indeed, in his agrarian legislation his measures were too radical to receive the approval of Stein, who was less mastered by the modern spirit, and more disposed to preserve and improve old German institutions than to follow what were then called "French models." By his foreign policy, cautious or energetic as circumstances dictated, Hardenberg piloted Prussia successfully through the stormy period which intervened between his return to power and the fall of Napoleon. Because he remained in office during the evil days of 1811-12, he was often accused of acquiescing in the degradation of his country. But he was really all through faithful to Prussia, and his temporary attitude of submission to France seemed to him imposed by the necessities of the situation. He was one of those who signed the peace of Paris in 1814, and on its conclusion was raised to the dignity of prince. He attended the congress of Vienna, and, some years later, those of Aix-la-Chapelle and Verona. He procured from the king, in May 1815, an edict promising the establishment of a system of popular representation; but under the influence of the reaction which prevailed in Germany in 1818 and 1819, this promise was broken, and instead of a states-general, the plan of provincial estates was adopted, which subsisted till 1847. Hardenberg was placed in a false position by continuing to hold the chancellorship when reaction was dominant; and though he was to the last in feeling and principle a reformer, his policy became so indeterminate and ambiguous that when he died, on his return journey from the congress of Verona, Stein declared his disappearance to be a happy event for the Prussian monarchy. But this was a harsh, not to say unjust, judgment, inspired, doubtless, in a great degree by the gross irregularities of the deceased statesman's private life. Be this as it may, Stein and he are indissolubly associated as fellow-workers in a great cause; and, as Ranke has said, whatever weaknesses or sins may be chargeable to Hardenberg, his name is written in imperishable characters on the history of Prussia.

[The materials for Hardenberg's biography used to be drawn from the *Mémoires d'un homme d'état, 1792-1815*, which were popularly supposed to be his work. It is now known that this idea was unfounded. His genuine memoirs were edited by Leopold v. Ranke in 1877; they deal, however, only with the years 1804-7. Ranke also published a work of his own, supplementary to the Memoirs, *Denkwürdigkeiten des Staatskanzlers Fürsten von Hardenberg*, 3 vols., 1877. Much information respecting Hardenberg will be found in the late Sir J. Seeley's *Life and Times of Stein*, 3 vols., 1878, which has been largely used in the foregoing sketch.] J. K. I.

HARMONIES OF ECONOMICS. The theory that individual interests consciously pursued as such are naturally harmonious was early suggested by many writers, but it was first definitely stated by Henry C. CAREY in America, and Frederic BASTIAT in France, two writers whose works appeared within a year of each other, and whose conflicting claims to originality have never been satisfactorily decided. They sharply antagonise the English school, especially as represented by Ricardo and Malthus. The most important of these conclusions to which exception is taken are thus summed up by Bastiat in his *Harmonies Économiques*, published in 1850.

(1) *The Theory of Value*.—While claiming that value originates in labour, they had agreed in attributing value to natural agents, including land, on which no labour had been expended. These goods, which had cost nothing, were none the less appropriated and made to command for their owners the labour of other men. This Bastiat characterises as "evident injustice."

(2) *The Ricardian Theory of Rent*, according to which the price of the products of the soil is determined by the labour needed to produce them on the least productive soils in cultivation. The excess produced on the more productive soils goes to the landowner as rent and increases in absolute and relative amount as the poorer lands are called into cultivation. The result of this law is stated thus: "Increasing opulence for men of leisure; increasing misery for men of toil; in a word, foreordained inequality."

(3) *The Malthusian Theory of Population*. Population tends to increase more rapidly than subsistence, and this tendency, so disastrous to well-being, can be counteracted only by self-control, which "no one thinks of," or by vice, misery, war, pestilence, famine, etc. The conclusion of this law is stated as "inevitable pauperism."

Against this trio of "evident injustice," "foreordained inequality," and "inevitable pauperism," which together constitute a "theory of discord," Bastiat protests with fervid eloquence rather than with severe logic, or observation of life. He undertakes to prove:

(1) That value is due wholly to labour, or

more exactly to services rendered to one person by another; (2) that natural agents as such—"the gifts that God had lavished gratis upon his creatures"—are not and cannot be appropriated; that land values represent only the labour which would be necessary with present methods to bring land from a wild state to its present condition; (3) that the return to capital increases absolutely but decreases relatively as capital is increased in amount; (4) that the return to labour increases both relatively and absolutely as capital increases; (5) that "other things being equal, the increasing density of population is matched by an increasing facility of production."

This "theory of harmony" promises increasing prosperity to all the factors of production on one condition on which Bastiat is never weary of insisting,—namely, *liberty*. Since self-interest, when pursued ever so eagerly, or with ever so great indifference to other men's interests, works good to all, all interference with its action is necessarily detrimental. The state should absolutely limit its function to the maintenance of "justice" (a most ambiguous limitation). Laws restricting the exchange of commodities or otherwise interfering with industrial liberty under pretext of securing harmony of interests are not only destructive to that harmony which can only coexist with liberty, but they are a violation of natural right. This 18th-century argument is one to which Bastiat continually recurs. In logical consistency with his system, he carries the doctrine of *laissez-faire* to its utmost extreme.

Bastiat's proof of the proposition mentioned is peculiar. His one method of argument is that of illustration, a method no doubt legitimate, but usually inadequate and always liable to abuse. Bastiat certainly abused it. It is easy to find cases where value is proportioned closely to labour expended, and a long enumeration has great power over the mind, but when the value of a diamond accidentally picked up is attributed to the labour of appropriation, the argument is strained, to say the least. Still less satisfactory is his treatment of rent. His somewhat piquant imaginary conversations, between a landowner and a would-be purchaser of his products, or his land, completely ignore the fact on which Ricardo's whole theory is based, namely, the unequal productivity of different soils. Disregarding this inequality, Bastiat, as Loria nowadays, asserts that rent is impossible while free land remains. His brilliant language hides his argumentative weakness. While not denying the tendency of population to increase, he sets off against it the constant improvement of production, and assumes that the tendency is innocuous. He thus of course denies the law of diminishing returns, a law which is at best but modified by the facts he adduces. His theory of capital is

in accord with the known tendency of the rate of interest to fall as capital increases, and is little more than a statement of this fact.

Bastiat's optimism is unrivalled in its *naïveté*, and his propositions, even if proved, by no means justify it. Granting that rent is but the payment for services rendered by the land owner "or his forefathers," is there no possible "injustice" in a law of unmitigated inheritance complicated by the vicissitudes of conquest, and sharp bargaining? If capital obtained a relatively smaller share of the product as its amount increases, there still remains the tendency of capital to accumulate in few hands, and thus the relative importance of the *capitalist* may be constantly increasing. The *ENTREPRENEUR* is ignored by Bastiat, and still more the factor of *MONOPOLY*, which seems to appear on the scene as naturally as any other factor.

The wide divergence between Bastiat's theory of harmony and the facts of life under every variety of industrial *régime* suggests the fundamental fallacy of his system. It rests upon a false theory of nature. The involuntarily social activities of men are assumed to be natural; the voluntary activities are artificial and *unnatural*. Nature, thus narrowly conceived, is held to be ordained by a beneficent creator; the artificial, simply because it is contrary to "nature," violates the divine law and natural right, and is pernicious. This was the philosophy of *ROUSSEAU* and the 18th century.

HENRY C. CAREY (in *Harmony of Interests*, published 1849) agrees with Bastiat, if indeed he did not furnish his fundamental propositions. Unlike Bastiat, however, he appreciated the value of arguments from real life; and while making large use of fanciful illustration, he contributed other arguments of more importance. The chief of these is his argument on rent. Ricardo assumes that men begin cultivation on the best lands, and then descend to the poorer. But Carey tries to prove from history that the opposite has been the case. The evidence adduced is worthy of consideration, though hardly conclusive. Aside from this, however, Carey seems to have overlooked the fact that the chronological order of settlement was an accident of Ricardo's formula, not its essence. When soils of unequal productivity are once in cultivation, the disparity gives rise to rent, whichever was cultivated first.

A more noteworthy result of Carey's observation was his conversion to the theory of *PROTECTION*. Realising that the agricultural and manufacturing interests are complementary and necessary to each other, he was impressed by the fact that the development of one in the United States, and the other in England, largely destroyed that mutual helpfulness, so great was the barrier of distance and the cost of transportation. American interests plainly required the development of both

together. A study of the shifting commercial policy of the United States led him to conclude that a policy of protection was necessary for this. To the promotion of this policy he therefore devoted nearly the whole of his first book, the *Harmony of Interests*. Advocacy of state intervention thus became as pronounced with Carey as that of *laissez-faire* with Bastiat. Thus, while the two agree in rejecting the "theory of discord" of Ricardo and Malthus, and in emphasising the harmony and beneficence of the natural order, Carey freely recognises as belonging to that order forces which Bastiat had denounced as destructive of liberty and so of harmony. Under either form the theory of harmony of interests is optimistic—more so, it will seem to many, than the facts will warrant; but, as stated by Carey, it at least stands for juster premises, broader recognition of facts, and sounder methods of inquiry, than with Bastiat. Neither writer has had disciples of note, though extensive use has of course been made of their arguments.

[In addition to Bastiat's *Harmonies économiques* and Carey's *Harmony of Interests* already mentioned, may be cited Carey's larger work, *Principles of Social Science*; also criticisms of their theories in Ingram's *History of Political Economy*, Walker's *Land and its Rent*, and especially Böhm-Bawerk's *Capital and Interest*, Stuart's translation. Bernard de MANDEVILLE advances the theory that selfish interests advance the public welfare, in his *Fable of the Bees or Private Vices Publick Benefits*, published in 1714. The belief in a harmonious natural order also pervades the writings of Quesnay and the physiocrats generally, as well as those of Adam Smith and Rousseau, underlying their optimism on the one hand, and the doctrine of *laissez-faire* on the other. See also Lassalle's *Bastiat. Schulze von Delitzsch.*]

E. H. P.

HARMONIES OF INDUSTRIES. See HARMONIES OF ECONOMICS.

HARMONISTS. See COMMUNISM.

HARRINGTON, JAMES (1611-1677), an eminent political writer, was the son of Sir Sapcote Harrington of Exton, in Rutlandshire. He studied at Oxford under Chillingworth, and then spent some years on the continent. He was greatly impressed by the flourishing condition of Holland, admiring its commerce, its social developments, and its political liberty. It was here he began his studies in political economy and government; and he was frequently heard to say that, "before he left England, he knew no more of anarchy, monarchy, aristocracy, democracy, oligarchy, or the like, than as hard words whose signification he found in his dictionary." Although a republican by conviction, Harrington was appointed in 1646 one of the personal attendants of Charles I. That unfortunate monarch delighted in his company, finding him to be very ingenious. "They had often discourses concerning govern-

ment; but when they happened to talk of a commonwealth, the King seemed not to endure it" (Wood's *Athenæ Oxonienses*). Harrington became strongly attached to the king, and accompanied him to the scaffold. His execution affected him so much that he retired to his library and his literary pursuits. But to convince his friends that his grief was personal and not political, he produced his *Oceana*. This celebrated work—half romance, half treatise—on political philosophy, was written for the purpose of setting forth the best form of government for a commonwealth. The author's elaboration of his ideal republic was something in the same style as Sir Thomas More's *Utopia*. Harrington's idea was that government should be established upon an equal agrarian basis, rising into the superstructure of three orders—the senate debating and proposing, the people resolving, and the magistracy executing by an equal rotation through the suffrage of the people. The chief political doctrines inculcated in the work are these: the real basis of power is property, especially landed property; accordingly landed property should be distributed and held in such a way that no one person should derive from it more than a fixed amount of revenue; the rulers of the commonwealth should be changed every three years, their successors being elected by ballot. The *Oceana* was published in 1656, and excited much controversy. England figured as *Oceana*, Scotland as *Marpesia*, Ireland as *Panopæa*, Henry VII. as *Panurgus*, Henry VIII. as *Coramunus*, Queen Elizabeth as *Parthenia*, Cromwell as *Megaletor*, etc. The work was dedicated to Cromwell, who read it, but characteristically declared that "what he had won by the sword, he would not suffer himself to be scribbled out of."

Harrington not only endeavoured to propagate his republican opinions by writing, but with the same object formed a society of gentlemen called the Rota, who met at Miles's coffee-house, Westminster, and indulged in able and brilliant discussions concerning government and the ordering of the commonwealth. They had a ballot-box, and this being a novel form of voting in England, it attracted great attention. The society continued to meet until General Monk paved the way for the return of Charles II. After the restoration, Harrington lived more privately, but he was still regarded as a dangerous person, who maintained and propagated principles which could never be reconciled with monarchical government. He employed himself now in reducing his politics into short and easy aphorisms methodically digested, and freely communicated his views to all who visited him. While engaged in completing his system, he was arrested at the close of 1661, and committed to the Tower of London for treasonable designs

and practices. He suffered a long and severe imprisonment, in the course of which he lost his reason. In his latter years he wrote severely against the Stuarts, especially condemning Charles I., whom he had once strongly admired, for his consummate and obstinate tyranny. He also wrote various essays and papers in defence of his great work. His writings were edited by Toland in 1700, and the *Oceana* was partly reprinted as recently as 1887. Harrington died of palsy at Westminster.

[Chalmers's *Biographical Dictionary*.—Toland's *Life and Works of James Harrington*, 1700.—Birch's edition, 1737.—*Oceana*, as reprinted by Henry Morley, 1887.—Bonar's *Philosophy and Pol. Econ.*, 1893.] G. B. S.

HARRIS, JOSEPH (1702-1764), said to have begun life as a blacksmith at Talgarth, in Breconshire, his native place, was appointed assay master of the mint in 1748. Besides several works on navigation, trigonometry, optics, and astronomy, he wrote an *Essay on Money and Coins*, in two parts, published in 1757 and 1758. He introduced the first part by an enlightened statement of some leading principles of political economy, still worth reading; he dwelt particularly on the relation of the minimum standard of subsistence to the cost of production; and he treated the whole subject of money and of foreign exchanges with singular clearness both of view and of style. He was perfectly free from the mercantile theory of wealth, and not very far from free-trade principles. His monometallism was pronounced, and he doubted whether the existing silver standard could be exchanged for a gold standard. The second part is a vigorous demonstration of the evils which must follow any debasement of the coinage, with an historical account of the variations in the standard before his time.

[*Dict. of National Biography*.—R. Williams, *Dict. of Eminent Welshmen*.—See also references in M'Culloch, *Literature of Political Economy*, and in Jevons's article on Cantillon, *Contemp. Review*, January 1881.] R. G. P.

HARRISON, WILLIAM (1534-1593), clerk in holy orders, is a writer of economic importance through the inclusion in his *Description of England* of many valuable details as to the economic condition of Elizabethan England. Thus he acquaints us with the fact that wine was a home product at that time. In part ii. of the above work he urges that the action of the merchants in procuring the prohibition of foreign bottoms has led to a rise in prices. As this was part of the popular navigation policy, his attack on it shows considerable independence of thought.

In addition to the above work, Harrison left two MSS., one dealing with contemporary weights and measures (1587), the other a chronology.

[Ashley, *Economic History*, vol. i. pt. ii.]

E. C. K. G.

HARTE, REV. WALTER (1709-1774), a friend of Pope, travelling tutor to Lord Chesterfield's son, and vicar of St. Austell and St. Blazey in Cornwall, 1750. Besides miscellaneous essays and poems and an unsuccessful history of Gustavus Adolphus, he wrote two *Essays on Husbandry*, 1764, the first on agriculture in general, the second on the cultivation of lucerne. The former, a literary eulogy of agriculture as the basis and support of all flourishing communities, is rambling and wholly unscientific in its treatment of the subject, but enterprising and suggestive of many foreign, even American and Asiatic, plants and methods which might be introduced into England.

[Chalmers's *Biog. Dict.*; the dates in this account may be corrected by Foster's *Alumni Oxonienses*, 1715-1886.—*Dict. of National Biography*.—*Gent. Mag.* 1774.] E. G. P.

HARTLIB, SAMUEL (fl. 1630-1660), the friend of Milton and Sir W. Petty, published or edited, sometimes with additions of his own, many valuable works on agriculture and kindred subjects. Amongst these may be mentioned, 1. *A Discourse of Husbandrie used in Brabant and Flanders*, etc. (by Sir Richard Weston), London, 1650, 4to, 2nd ed.; corrected and enlarged, London; 4to, 1652. When the first edition was published, Hartlib did not know the name of the author. 2. *An Invention of Engines in motion*, etc. (by Cressy Dymock), London, 4to, 1651; Reprinted, with a biography of Dymock, in Dirck's *Memoir of Hartlib*. 3. *An Essay for the advancement of husbandry learning; or propositions for the erecting a College of Husbandry; and in order thereunto for the taking in of pupils or apprentices. And also friends or fellows of the same Colledge or Society*. 4. *The Reformed Husbandman; or a brief Treatise of the errors, defects, and inconveniences of our English Husbandry*, etc., London, 4to, 1651. 5. *Samuel Hartlib, his Legacie; or an Enlargement of the Discourse of Husbandry used in Brabant and Flanders*, etc., London, 4to, 1651. This work consists of Hartlib's address, Sir Richard Weston's "legacy" to his sons, and "a large letter" to Hartlib (by Cressy Dymock or Robert Child). The third edition (1655) is a much larger work, and has the title *Samuel Hartlib, his Legacy of Husbandry. Wherein are bequeathed to the commonwealth of England, not only Brabant and Flanders, but also many more outlandish and domestick experiments and secrets (of Gabriel Plats and others)*. 6. *A designe for Plentie, by an universall planting of Fruit-trees*, etc., London, 4to, 1652. Hartlib did not know the author of this work, which was given to a friend of his by Colonel John Barkstead. 7. *A discoverie for division or setting out of land as to the best form*, etc., 1653. This consists mainly of a letter from Cressy Dymock. 8. *The Compleat Husbandman; or*

a discourse of the whole art of Husbandry, both Forraign and Domestick, etc. Unto which is added, A particular discourse of the Naturall History and Husbandry of Ireland. Two parts, London, 4to, 1659. The second part consists of an appendix to the "Legacie," with the date 1652. 9. *An Essay upon Master W. Potter's Designe; concerning a Bank of Lands to be erected throughout this commonwealth, etc.*, London (n. d.) 8vo.

[For an account of Hartlib's life and other publications, see *Dictionary of National Biography*.] W. A. S. H.

HASSIA, HENRICUS DE. See LANGENSTEIN.

HAWKINS, EDWARD (1780-1867), numismatist and antiquarian, was born at Macclesfield, and educated partly at the grammar school there, partly by private tuition. After being in the Macclesfield bank for a time, he entered into partnership with his father in a bank at Swansea, and together they managed the copper works at Neath Abbey (*Dict. Nat. Biog.*). In 1806 he was elected fellow of the Linnean, in 1821 fellow of the Royal Society, in 1826 fellow of the Society of Antiquaries, and president in 1850 of the Numismatic Society. In 1825 he acted as deputy for Taylor Combe, keeper of antiquities and coins in the British Museum; upon his death in 1826, Hawkins was appointed to the post, which he occupied until 1861 (*Stat. and Rules of Brit. Mus.*, pp. 41, 43; *Medallie Illustrations*, i. vi.). From an early age he had devoted much attention to the study of coins, and amassed a very complete series of English medals, while his collection of English political caricatures was the finest known. Both collections were purchased by the trustees of the British Museum—the medals in 1860, and the prints in 1863 (*Medallie Illustr.*, i. vi.).

Hawkins's most important contributions to numismatic literature, in addition to valuable papers published in the *Transactions* of the Numismatic Society and the Society of Antiquaries, are (1) *The Silver Coins of England* (1841). This, with necessary alterations and additions, has since been edited by his grandson, R. D. Kenyon (1876, 1887), and remains the standard work on the subject. (2) He also collected materials for a work on medals. It was intended to issue this as a Museum publication, but when the portion completed to the close of the reign of William III., was printed and submitted to the trustees in 1852, they declined to pass it, in consequence of the expression of certain political opinions which they considered undesirable in a government publication (*Hansard*, 3rd July 1854; *Medall. Illustr.*, i. vi.). After some years the historical notes were, with Hawkins's sanction, revised by his successor, W. S. Vaux, and by Sir A. W. Franks. Further matter, which resulted from inspection of various foreign collections unvisited by Hawkins, led to certain modifications of opinion, and to the addition of many fresh illustrations. The work,

brought down to the death of George II., was eventually edited by Sir A. W. Franks (now keeper of Brit. and Med. Antiquities); and by H. A. Grueber (now assistant keeper of coins and medals), as a Museum publication in 1885, under the title of *Medallie Illustrations of the History of Great Britain and Ireland*. (3) *Description of Anglo-Gallic Coins in Brit. Mus.*, begun by Taylor Combe, was completed by Hawkins (1826). In addition to these, Hawkins completed Combe's work in *Description of Ancient Marbles in Brit. Mus.*, v. (1826), and edited parts vii., x. (1839, 1842, 1845). His many valuable memoranda on his collection of prints were purchased by the Museum, and incorporated, after revision, in the *Catalogue of Prints and Drawings in Brit. Mus.*, iii. pt. i. prepared by F. G. Stephens (1877). For the Chetham Society, Hawkins edited *Sir W. Brereton's Travels* (1844), and *The Holy Lyfe and History of Seynt Werburge* (1848).

[See Ward, T. H., *Men of the Reign*, 1885.—*Proc. of Antig. Soc.*, 23rd April 1868.—*Numismatic Chronicle*, N.S., vii. (1867).—*Athenæum*, 15th June 1867.—Introductions to the various works already mentioned.] E. A. M.

HAWKINS, SIR JOHN (1719-89). The son of a carpenter, who was afterwards a surveyor, Hawkins was originally brought up to his father's trade, but abandoned it in favour of the law, and became an attorney. He married a Miss Storer, who brought him a large dowry which enabled him to retire from business; and he became chairman of the Middlesex justices. He was knighted in 1772, in recognition of his services in suppressing the election riots at Brentford in 1768, and the Moorfield riots in 1769. His experience of the bad condition of the roads led him to publish his *Observations on the State of the Highways, and on the Laws for amending them and keeping them in Repair* (Lond., 1763), subjoining to them the draft of a bill consolidating former acts for the maintenance of the highways. The act based on this was so skilfully drawn that for many years it did not require amendment. The treatise takes up the history of various acts of parliament on this head, and shows how they had fallen into disuse, with some remarks on the practical difficulty of legally enforcing the acts in many cases. Hawkins's observations do not apply to turnpike roads, which were in good condition. He also expatiates on the fact that the rich paid proportionately far less than the poor towards the maintenance of the highways. Hawkins had given much attention to music, and also published a *Life and Works of Dr. Johnson* (Lond., 1787), with whom he had been intimate. Boswell, in his *Life of Johnson*, is consistently unjust to Hawkins, who, however, appears to have been a somewhat coarse man. He was buried in Westminster Abbey.

[Chalmers, *Biographical Dictionary* (from information supplied by the family), Lond., 1812, 1817.—Boswell, *Life of Johnson*, edited by J. W.

Crocker, Lond., 1848.—Sir G. Grove, *Dictionary of Music*, Lond., 1879-88.] R. H. H.

HAYES, JOHN L. (1813-1887), born in Maine; died in Cambridge, Mass. For the last twenty-five years of his life he was actively identified with the tariff discussions in the United States, particularly defending protective duties in favour of the woollen interests. In 1865 he became secretary of the National Association of Wool Manufacturers, and edited their quarterly publication. He was president of the tariff commission of 1882, and was largely responsible for the report of that body. His writings were voluminous, and for the most part may be found in the several volumes of the *Bulletin* referred to, which is exceedingly valuable as reflecting the protectionist sentiment of the period.

Among his pamphlets may be mentioned *The Fleece and the Loom*, 1866.—*Wools of the United States*, 1872.—*Sheep Industry in the South*, 1878.—*The Farmers' Question*, 1880; and various writings on Reciprocity. See "Memoir" by G. B. Stebbins in *Bulletin of Wool Manufacturers*, vol. xviii. p. 97. D. R. D.

HAYNE, SAMUEL (fl. 1660-1697), surveyor of customs, was born probably in Devonshire in 1645. For seven years he was clerk assistant to Joseph Ash, collector of the customs of Plymouth and Cornwall. He then became an "adventurer at sea"; during the Dutch war of 1672, was employed in the prize office and the admiralty; engaged afterwards in the trade with France; and in 1680 was appointed riding surveyor of the customs and surveyor for the Navigation Act in Devon and Cornwall.

Hayne published: 1. *An abstract of all the statutes made concerning aliens trading in England*. . . . Also, of all the laws made for securing our plantation trade to ourselves, with observations thereon, proving that the Jews (in their practical way of trade at this time) break them all, to the great damage of the king in his customs, etc. . . . Together with the hardships and difficulties the author hath already met with, in his endeavouring to find out and detect the ways and methods they take to effect it, London, 4to, 1685. 2. *The manifesto of near one hundred and fifty Knights, . . . Merchants and citizens of London, against the Jews now in England*. . . . London, 1697, fol. W. A. S. H.

HAYNES, CHRISTOPHER (fl. 1713), merchant, was apparently engaged in the trade with Spain. During the controversy on the 8th and 9th clauses of the treaty of Utrecht (1713) he contributed "many useful pieces" on that subject to the *British Merchant* (see KING, CHARLES). W. A. S. H.

HAYNES, JOHN (fl. 1706-1715), wool factor, published: 1. *A view of the present state of the clothing trade in England, with remarks on the causes of . . . its decay, and a scheme of proper remedies for the recovery of it, etc.*, London, 1706, 8vo. 2. *Great Britain's glory, or an account of the great number of poor*

employed in the woollen and silk manufacturies; . . . with the reasons of the decay of these trades, etc., London, 1715, 8vo. (The latter is little more than a new edition of the former; it is apparently cited by McCulloch (*Literature of Political Economy*, p. 237), as *Provision for the Poor*.) 3. *Proposals for the more effectual preventing the exportation of wool (n. d.)*. He proposed the prohibition of water-carriage of wool, the registration of all wool produced in the country, prosecutions for infringement of the statutes dealing with the wool trade by special commissions appointed for that purpose, and other measures which he thought would prevent the exportation of wool. He is probably identical with the "John Haines" who addressed a memorial to the government in 1702, asking to be appointed "general supervisor" in Hampshire and Dorset for the prevention of the exportation of wool. His request was refused on the ground that the commissioners of customs could not advise the appointment of such an officer, or recommend a person "who had received the censure of the House of Commons on his knees."

[*Treasury Papers*, lxxxi. 26.] W. A. S. H.

HAXTHAUSEN, AUGUST FRANZ, Freiherr von (1792-1866), was born at Bökendorf in Westphalia. From 1808 to 1813 he studied at the school of mining at Clausthal. He served for some time as a volunteer in the Hanoverian army, and then went to the university of Göttingen to study law. He was there associated with a circle interested in art and poetry, from which proceeded a periodical to which Arnim, Brentano, and the brothers Grimm were contributors; and occupied himself much in the collection of German popular songs and sagas. In 1819 he returned to his native place, and devoted himself during several years to an earnest study of the agrarian condition of North Germany. He published, in 1829, the results of his researches in relation to the principalities of Paderborn and Corvey. This work attracted the notice of the then crown prince, afterwards King Frederick William IV.; the author was invited to Berlin, and was entrusted with the mission of examining in the respective localities the agrarian systems of the several Prussian provinces, and communicating the results of his inquiries to the ministry. To give him the necessary influence with the provincial officials, he was made a privy councillor. He travelled for nine years through the Prussian dominions, and collected ample materials for the great work which was projected. He published, however, only one volume, which dealt with the provinces of East and West Prussia (1839). A second volume, relating to Pomerania, was published twenty-two years later by A. Padberg (1861); this branch of the subject had been partially handled by Haxthausen in a brief treatise on the formerly Slavic districts of

Germany (1842). An article of his in a German periodical on the Russian ukase of 1842 regulating the contracts between the landlords and peasants in that country, attracted much attention; it was reprinted by the *Allgemeine Zeitung*, the *Débats*, and the *Times*, who all interpreted the signature A. v. H. as being that of Alexander von Humboldt. This article led to Haxthausen's appointment by the Emperor Nicholas to conduct investigations in his dominions similar to those on which he had been employed in Prussia. He travelled extensively in Russia during 1843-44, the king of Prussia continuing his salary during his absence, and so making him independent of the Russian authorities. The fruit of his inquiries appeared in the following publications:—*Studien über die inneren Zustände, das Volksleben, und insbesondere die ländlichen Einrichtungen Russlands* (3 vols. 1847-1852), also published in French with the title *Études sur la situation intérieure, la vie nationale, et les institutions de la Russie* (1848-1853). An English translation by Robert Faris was published in 1856, with the title of *The Russian Empire—Transcaucasia*: this was an account of the family and communal life, and social condition of certain populations between the Black and Caspian Seas (1856); an English translation, by John Edward Taylor, appeared in 1854, before the German original was published. There appeared besides in English, by the same translator, as a kind of supplement to the foregoing, *The Tribes of the Caucasus, with an account of Schamyl and the Murids* (1855). We have also from Haxthausen's pen the following: *De l'abolition par voie législative du partage égal et temporaire des terres dans les communes russes* (1858); and *Die ländliche Verfassung Russlands, ihre Entwicklung und Feststellung in der Gesetzgebung von 1861* (1866).

Haxthausen was a member of the United Diet in 1847, and also for a short time a member of the first Prussian chamber. The practical objects which Haxthausen had in view in his treatment of the agrarian condition of North Germany, were the liberation of the soil from the power of capital, and the reform of the constitution of the provincial estates (*Ständische Verfassung*). Roscher regards him as one of the best of the group of conservative writers who at this period treated German economical questions, and who, both as owners of landed property and as state functionaries, understood many things better than the abstract liberal economists. He considers him, in particular, to have thrown new light on the question of the village communities of the middle ages. The same eminent critic speaks highly of his power of accurate observation, as evidenced by his Russian investigations; but remarks that he shows the usual "pseudo-historical" weakness

of reactionaries in recommending the maintenance by the Russians of their *Feldgemeinschaft*, even after the abolition of serfdom, thus confounding the transitory peculiarity of a particular stage of culture with a permanent trait of the national character.

[Lippert in the *Handwörterbuch der Staatswissenschaften*, edited by Conrad and others (vol. iv. 1892).—Reiferscheid in the *Allgemeine Deutsche Biographie* (vol. xi. 1880).—Roscher, *Geschichte der N. O.*, p. 1027.] J. K. I.

HEARN, WILLIAM EDWARD (1826-1888), born in the county of Cavan, and educated at Trinity College, Dublin, was, after having been professor of Greek at Queen's College, Galway, from 1849 to 1854, appointed in the latter year professor of political economy and other subjects at the university of Melbourne. Later he became a member of the legislative council of Victoria, and took an active part in the affairs of the colony up to his death.

Hearn's principal contribution to economics, the happily-named *Plutology* (1st ed. 1864, 2nd, 1878), is a model of the style which may be called classical. Like Hermann or Ricardo, Hearn holds an intermediate course between the highest abstractions and mere information; neither soaring to mathematical analysis, nor creeping among historical details. As one among many specimens of this method, the chapter on exchange (*Plutology*, ch. xiv.) may be referred to, presenting as it does all the relations of price to utility and cost of production, except those which can hardly be expressed without mathematics. So the chapter on the circumstances which determine the extent of capital may seem to fall short of perfection only by the want of a more quantitatively exact analysis of the influence of DISTANCE IN TIME (*q.v.*) on value. It is justly said by Prof. Marshall: "Hearn's *Plutology* . . . is at once simple and profound: it affords an admirable example of the way in which detailed analysis may be applied to afford a training of a very high order for the young, and to give them an intelligent acquaintance with the economic conditions of life, without forcing upon them any particular solution of those more difficult problems on which they are not yet able to form an independent judgment." Among other high testimonies to the excellence of this work may be cited Jevons's reference, in the "Concluding remarks" of his *Theory*, to "Professor Hearn's views." Hearn wrote several other works, cited below, relating to social science, and was also a frequent contributor to the local press of Melbourne.

The Cassell Prize Essay on the Condition of Ireland, 1851 [In three chapters: (1) investigates the causes of the existing evils; (2) estimates the industrial resources of Ireland; (3) proposes remedies for such distress,—mostly simple legal reforms.]

The Aryan Household, its Structure and its Development: an Introduction to Comparative Jurisprudence, 1879.—The Government of England, its Structure and its Development, 1887.

F. Y. E.

HEARTH-MONEY OR HEARTH-TAX.

The earliest such tax in England, "a fumage, or tax of smoke farthings," was levied in Anglo-Saxon times, probably as a customary payment to the king from all hearths but those of the poor.

In 1662 a tax of 2s. was levied on every hearth or stone in all dwelling-houses, except those of the poor who were exempt from church-rate and poor-rate, or fulfilled certain other conditions. In 1689, though the tax produced £170,000 a year, it was repealed on account of its unpopularity: it reached a poorer class than the old subsidies which it had superseded; it was farmed; and the inquisitorial visits of the inspectors, or "chimney-men," were deeply resented (see HALIFAX, EARL OF).

[Dowell's *Hist. of Taxation and Taxes in England*, vols. i., ii., iii.]

E. G. P.

HEATHFIELD, RICHARD (c. 1775-1859), accountant. He proposed a tax of 15 per cent on all property, to pay off the national debt, and endeavoured to explain the advantages which would accrue from this proceeding. The same expedient had been suggested by A. HUTCHESON in 1717, when the debt was only some £50,000,000. The suggestion derives its chief importance from having had the approval of RICARDO, and from having been proposed in parliament by General Palmer in 1832. Heathfield also wrote other tracts embodying the same proposals.

Elements of a Plan for the Liquidation of the Public Debt of the United Kingdom (Lond., 1819), and *Further Observations on the Practicability and Expediency of liquidating the Public Debt of the United Kingdom, including some Considerations on Population and the Poor* (Lond., 1820).

R. H. H.

HEDGMIT. A word used by Malynes, the existence of which sets before us the frequent manufacture of false money by persons in authority (see POLLARDS and CROCKARDS). "If any Hedgmit (for so doe the States of the United Provinces of the Netherlands call the Mints of pettie Lords, which by falsified standards do imitate to coyne the money of other Princes)" . . .

[Malynes, *Lex Mercatoria*, 1622, p. 489.]

HEDONISM. This term, derived from the Greek *hêdonê* (ἡδονή)=pleasure, is used to describe that philosophy which makes the attainment of pleasure and the avoidance of pain the supreme end of action,—in other words, defines virtue to be that course of conduct which produces the largest sum of happiness. Hedonism is thus the same as epicureanism in the proper sense of that term. Utilitarianism is hedonism modified by the substitution of the

happiness of mankind for the happiness of the individual as the aim of virtuous conduct. Political economy has no necessary connection with either the selfish or the unselfish form of hedonism. Since, however, the one or the other has been very widely accepted in the 18th and 19th centuries, it is natural that many eminent economists should have been hedonists in their moral theories. See MORALITY, SYSTEMS OF, IN RELATION TO POLITICAL ECONOMY and the writers there referred to. F. C. M.

HEEREN, ARNOLD HERMANN LUDWIG (1760-1842), studied in the university of Göttingen, where he became in 1787 professor of philosophy, and in 1801, of history. As an author, he remained several years uncertain whether to devote himself to philosophy or history; his first publications were editions of the *De Encomiis* of the rhetorician Menander, and the *Eclogæ physicae et ethicae* of Stobæus. His most important contributions to historical studies have been collected in his *Historische Werke* (15 vols. Göttingen, 1821-26), among which ought to be mentioned here vol. vii., *Handbuch der Geschichte des Alterthums mit besonderer Rücksicht auf Verfassungen, Handel und Colonien*, and vols. viii. and ix.; *Handbuch der Geschichte des Europäischen Staatensystems und seiner Colonien*. But the work which from the moment of its appearance conferred celebrity on his name (vols. x. to xv. of the *Historische Werke*), and which has been translated into most European languages after having been recast in successive editions, is the *Ideen über die Politik, Verkehr und Handel der vornehmsten Völker der alten Welt*.

Heeren himself explains his object in the Preface (*Vorrede*): "I write neither a history of ancient nations, nor a general history of political systems and trade. . . . My plan is limited, excepting preliminary general views, to isolated pictures of various nations (p. iv. 2nd ed. 1805). I have no hypothesis to found, no favourite tenets to demonstrate, no opponent to overthrow. . . . I state what I have found as I found it; what is certain as certain; what is probable as simply probable" (p. vi.).

Heeren may be considered as one of the earliest opponents to what has been called *Manchesterthum* in Germany. He writes in his chapter *Ueber Griechische Staatswirtschaft*: "Perhaps the Greeks were not fully aware of the importance of the division of labour, but they were free from the modern school philosophy which would gladly transform nations into mere wealth-producing herds. They felt, of course, that to live, man must produce; still it never struck them that man only lives to produce (vol. iii. p. 272). . . . Every high and divine feeling must be trampled down before there is room for such theories as degrade Socrates and Christ to the unproductive (*sterile*) class (p. 274). . . . It is possible to live happily in *Otaheit*

without regard to the system of Adam Smith" (p. 322).

Nevertheless he had accepted some of the teaching of the new school, especially respecting mercantilism: "Their aim (the Greeks) was not to keep the stock of minted coins inviolate, or to increase it; nothing was heard about the balance of trade, and the resulting high-handed (*gewaltsame*) regulations. They paid taxes, but without the modern object of directing industrial activity by means of the exclusion of this or that class of goods. The export of raw material was not prohibited, manufactures were not favoured at the expense of agriculture. In this sense, industry, commerce, and trade were free" (p. 283).

Heeren's history is perhaps deficient from the standpoint of modern minute criticism of texts, but its fluent and elegant style, its clear statement of facts, and judicial honesty in controversy, account for its former popularity. It has been translated into most European languages (into French in 1830-34, 6 vols. 8vo, and into English: *Historical Researches into the Politics, Intercourse, and Trade of the Principal Nations of Antiquity*, 3 vols. 8vo, Oxford, 1833). [See Notice in McCulloch's *Literature of Pol. Econ.*, 1845, p. 151.] E. ca.

HEGEL, G. W. F. (1770-1831), was educated at the Stuttgart gymnasium and Tübingen university. After some years' private tutorship in Switzerland and Frankfurt, and studious leisure in Jena, he became professor in Jena, 1805; for eight years rector of Nürnberg gymnasium, 1808-1816; professor at Heidelberg, 1816; and then at Berlin, 1818, where he remained till his death.

Hegel's leading characteristics are (a) his notion of development, and (b) his bold and thorough application of it to every phase of life and being. Development is to him a progress through conflict of opposites. Like Heraclitus, he finds that change is the essence of things; and his resemblance to the philosopher of Ephesus is undoubted, however fallacious it may be to find, with Lassalle, an almost complete Hegelian system in the sayings of the ancient philosopher. He finds that not only in our thoughts but in the nature of things, there is a constant process from one extreme to another, and then to a reconciling third, which in its turn becomes an extreme, and finds its own opposite, to be conquered by it and then to lie down with it within the fold of a new third reconciler, the fate of which is in due course the same. But the change is not simply flux and destruction; it is true development. Each third stage is more concrete than the last; each third stage contains in it all that has gone before. Hegel finds this notion most clearly realised in life, and especially in the most concrete forms of human life. Instead of treating law and morality as separate and

separable, he finds these notions to be abstract and false when separated, and to be true and concrete only when viewed together in the family, civil society, and state. Civil society, more particularly, is the domain of what the older economists called "natural liberty," where there is pursuit of private gain obeying laws of which the private persons are unconscious. So far Hegel vindicates to political economy its claim to a realm of its own, civil society. But the limits of it at once appear. Civil society, as it itself grew out of the family, must itself pass into the state, where there is a conscious union of regard for rights with regard for duties, and the public good is deliberately sought. The development of civil society into the state, a development which, in Hegel as in Aristotle, is to be taken logically, not historically, takes place through associations, commercial, professional, and otherwise. Finally the state itself is not an ultimate end; states are individual members of larger groups, and all groups are members of the one humanity. The progress of the human race from generation to generation and age to age is the subject of the philosophy of history; and there is the same relentless process there as in the case of the single society. As Dr. Weryho well expresses it, *mors immortalis* is taken for the law of life.

This idea of development, as a *mors immortalis*, was retained by the Hegelians MARX, Engels, and LASSALLE, when they created the new German socialism. They retained little else, for it became an axiom with them that all that is, is material; and spirit, that was to Hegel not only the roof and crown of things but the very essence of all things, was disowned altogether.

Their materialistic view of history marks a further alteration. Not only is there, to them, no spirit in Hegel's sense; but there is no progress except by changes in economic facts. The state of human societies as regards wealth—and especially the means and modes of producing wealth—is held to determine their condition in respect of all other features, hitherto supposed to be independent. Law, religion, and political institutions are thus supposed to be due to economical causes. This view, recently expounded by Professor Loria with even fewer reservations than by the Germans, would need a separate discussion. It receives no support from Hegel, and cannot be traced to his influence.

Hegel's influence, in fact, on political economy has been much less profound and direct than on philosophy. In no part of his voluminous writings does he give much space to economic discussion; and the keen interest shown by his contemporary Fichte in the condition of the people is absent in Hegel. Yet he deserves mention in the history of political economy, for it was a group of his disciples

that first fairly planted the philosophical idea of development in the soil of economics. The Young Hegelians, Marx, Engels, Ruge, taught at Paris, in the *Deutsch-Französische Jahrbücher* (1844), a revolutionary socialism founded on a notion of development derived from Hegel's, though confessedly unlike its parent in many important particulars. Proudhon's attempt to apply Hegelian formulas more literally, in the same direction, was not so skilful, as the controversy between Proudhon and Marx (1846-47) brought out very clearly. No doubt the connection between Hegel's principles and the application of them by this group of his followers did not become closer; German socialism soon became more economic than philosophical. But the attraction possessed by such a book as Hegel's *Philosophy of Right* for such men as Engels and Marx is a significant fact both for philosophers and economists. (See also LASSALLE; MARX; PROUDHON; RUGE).

Hegel's Works were edited by Marheineke, Schulze, Gans, Hotho, Michelet, Förster, Rosenkranz in 18 vols. (1832-40), to which is to be added a 19th vol. (1887), edited by his son Karl Hegel, and containing his correspondence.

[His Life by Rosenkranz was published in 1844. The *Philosophy of Right* is vol. 8 of Works. A summary is given in Bonar's *Philosophy and Political Economy* (1893), bk. iv., ch. iv., "Hegel." Another account, professedly from unpublished MSS. of Hegel, is given by Dr. Georg Mollat, *System der Sittlichkeit von Hegel* (Osterwieck), 1893, and Dr. Mollat has also published Hegel's *Essay on the German Constitution* (1893). For the relation of Marx to Hegel see Bonar *loc. cit.*, and also Barth's *Geschichtphilosophie Hegels* (Leipzig, 1890), and L. Weryho's *Marx als Philosoph* (Bern and Leipzig, 1894). For the relation of Lassalle to Hegel, see especially Lassalle's *Die Philosophie Heracleitos des Dunkeln*, etc. (1858), and his *Erworbene Rechte* (1861).] J. B.

HEIR. In popular language this expression is generally used for any one who inherits, sometimes also, more especially in the plural form, in the sense of next of kin. The etymological equivalents of the word in the continental languages (*héritier, erede, Erbe*, etc.) are generally used in the sense of the Latin word "heres," which designated a person who by reason of his parentage or of a testamentary appointment became the universal successor of a deceased person, and whilst taking over all the predecessor's property, was personally liable for his debts and legacies (unless he had taken advantage of the BENEFICIUM INVENTARII (*q.v.*). In English technical language the word "heir-at-law" is used for the person to whom freehold property descends in case of INTESACY (*q.v.*); in the case of copyhold property the designation is "customary heir." The words "and his heirs," when added to the name of a

person to whom land is conveyed in fee simple, indicate that he is to take an "estate of inheritance" and not a mere life estate, but they do not in any way prevent him from dealing with the property to the exclusion of his heir-at-law; the words "and the heirs of his body," on the other hand, indicate an estate tail (see ENTAIL, LAW OF). E. S.

HEIRLOOMS. In the correct use of the term heirlooms are those chattels which by the custom of particular places are attached to an estate of inheritance in land. They are not devisable by will but always descend with the estate. The term is, however, often used to denote chattels that are annexed to an estate of inheritance by the common law or by the terms of a will or settlement.

[Goodeve on *Real Property*, London, 4th ed. 1897.] J. E. C. M.

HELD, ADOLF VON (1844-1880), a distinguished economist, was born at Würzburg, where his father, Dr. Joseph von Held, was professor of jurisprudence. He pursued the study of political science at his native place, at Munich, and at Berlin. In 1872 he was appointed professor at Bonn, and in 1880 at Berlin; and in the same year his career, which had so far been one of brilliant promise, was cut short by his death from accidental drowning in the lake of Thun. He had been secretary, and an active member, of the *Verein für Sozialpolitik*. His first publication was Carey's *Sozialwissenschaft und das Mercantilsystem*, 1866. Roscher praises his article on Adam Smith in Hildebrand's *Jahrb.*, 1867, as containing one of the most unprejudiced and altogether excellent appreciations of the great Scotchman anywhere produced.

The principal writings of Held were *Die Einkommensteuer*, 1872.—*Die deutsche Arbeiterpresse der Gegenwart*, 1873.—*Sozialismus, Sozialdemokratie und Sozialpolitik*, 1877 (which may be described as a manifesto of the principles and policy of the *Kathedersozialisten*); and *Grundriss für Vorlesungen über National-Oekonomie* (2nd edit. 1878).—He left behind him in MS. *Zwei Bücher zur sozialen Geschichte Englands*, a portion of a great work, for which he had prepared himself by studies in London during June, July, and August 1875. This highly interesting fragment was edited in 1881 by G. F. Knapp.

[Roscher, *Gesch. der N.O.*, p. 1045.—Lippert in the *Handw. der Staatswissenschaften*.] J. K. I.

Held, though one of the earliest supporters of the *Verein für Sozialpolitik*, founded 1872, and himself a moderate state-socialist, could not refrain from a gibe at "socialists of the chair." Their very name, he said, implied that to become like Bebel and Liebknecht they only wanted courage (see the account of the *Verein* by Prof. Philippovich, *Quart. Journ. of Econ.*, January 1891, p. 228). His *Soziale Geschichte Englands* was certainly one of the causes of the revival in England itself of the study of the history of English industry and the study of the surroundings in which the classical

economists produced their works. The first part, containing the industrial and literary history of the fifty-six years from the *Wealth of Nations* to the Reform Bill is of more permanent value than the second which treats of the earlier history of English industry and the growth of modern manufacture. But even in the latter he calls attention to many sources of evidence, especially blue-books, on the condition of the labouring classes, that had been too long neglected by our own countrymen.

In his estimates of writers, statesmen, and popular leaders he is sometimes misled by his bias against Classical Economics, but he has an evident desire to be truthful, and we have always to remember that his book appeared without his final revision.

His theoretical principles were stated in two papers especially. First in his *Rede über die Sociale Frage, gehalten auf der freien kirchlichen Versammlung evangelischer Männer in der Garnisons-Kirche zu Berlin 12ten Oktober 1871* (reprinted, Wiegand, Berlin, 1872). He rejects the abstract method of the classical economists, their undue emphasis on self-interest, their negative view of the state as a mere policeman, their way of opposing self-help and state-help. He admits that we have learned from the socialists to pay due attention to the distribution of wealth. He approves of progressive taxation and interference with the right of bequest.

In his second paper *Ueber den gegenwärtigen Principienstreit in der Nationalökonomie, Preuss. Jahrb., Juli 1872*, he addresses not a popular but a learned audience. He goes a little way into economic history, but deals chiefly with questions of the day. We have, he says, to deal with a new phenomenon—the rise of a school of *Kathedersozialisten* in opposition to *Manchesterthum*, in that very year 1872. Individualism pure and simple has, Held says, no answer to Marx; and *Kathedersozialismus* is the only safeguard against the “red spectre.”

It may be remarked that in this paper as elsewhere Held regards MARX as the teacher and LASSALLE as only the pupil. J. B.

HELPERICH, JOHANNES A RENATUS VON (1818-1892), was a pupil of F. B. HERMANN, whom he succeeded in the chair of political economy at Munich. Helperich shares with D. G. Mayr the honour of having re-edited Hermann's *Staatswirtschaftliche Untersuchungen*. Helperich was for some forty years one of the editors of the *Tübinger Zeitschrift*, to which from time to time he contributed articles on a variety of subjects; such as the “Unity of German Currency” (1850), “Sugar-duties” (1852), “The Austrian paper currency” (1855-67), “Eloge of Hermann” (1878). Helperich's principal work on the *Periodic Oscillations of the Precious Metals since the discovery of America to the year 1830* is remarkable on account of its polemic against the Quantity Theory of currency, which the author regards as “*durchaus unrichtig*.” The quantity is but one among the circumstances of supply and demand which govern the value of gold. This value, when

once established, is preserved by a certain *vis inertiae* (p. 38). “The price of goods is dependent on their own value-determination” (*von der eigenen Werthbestimmung abhängig*). The price of goods determines rather than is determined by the quantity of gold (a *sub finem* statement which may perhaps be compared with that made by Mr. Giffen in the *Nineteenth Century* for Nov. 1889). True to his principles, Helperich regards the rise in prices in the period from the discovery of America to 1550 as in the main not due to the influx of gold. He has to admit, indeed, that at a subsequent period quantity is a dominant factor. He made a good use of the historical material available when he wrote. His remarks on the method of measuring the value of money may be read with advantage (see MONEY).

Von den periodischen Schwankungen im Werth der edeln Metalle, von der Entdeckung Amerikas bis zum Jahr 1830. Nürnberg, 1843. — *Zeitschrift für die gesammte Staatswissenschaft*, Tübingen, passim. Articles on Taxation, and ‘Forstwirtschaft’ in Schönberg's *Handbuch*. F. Y. E.

HELLER. By the provisions of a law passed in August 1892, a gold crown of a hundred hellers has been adopted as the standard of value for Austria-Hungary. This crown, which is money of account, being equal to 0.417 of a pound sterling (or ten pence), the heller is of the value of one tenth of a penny. The coin bearing the name heller is a bronze piece weighing 1.6 grammes. There is also a 2-heller piece in bronze, and 10 and 20 heller pieces made of pure nickel.

Formerly in South Germany four hellers were equal to a kreutzer, and 60 kreutzers to a gulden.

F. E. A.

HELVETIUS (1715-1771), the son of the first physician of the queen of France; owed to this high protection the post of farmer-general at the early age of twenty-three. He resigned in 1751, and devoted himself to literary pursuits; his house had always been a centre of the polite and philosophic society of the time. His principal books are the treatises *De l'Esprit* (1758) and *De l'Homme, de ses facultés intellectuelles et de son éducation* (1776), which was published after his death, and in which he endeavoured to explain the parts of his first book which, after a previous period of brilliant popularity, had given offence in the philosophic circles of Paris.

The main position of Helvetius may be summed up as follows: man is a purely sentient animal only differing from other animals by a higher degree of physical sentiencey.¹ Human

¹ For the use of this word see Herbert Spencer. “Once more let me emphasise the truth that since a society in its corporate capacity is not sentient, and since the sentience dwells exclusively in its units, the sole reason for subordinating the sentient lives of its units to the unsentient life of the society, is that, etc.” (Herbert Spencer, *Justice*, ch. xxix, § 187, ch. entitled, “The Limits of State Duties Concluded”).

passions are nothing else but the various modes of manifestation of this physical sentience, which is the only motor of human actions: pleasure or pain are their unavoidable results: to pursue the former and to evade the latter is to conform to the only natural law. "He is a virtuous man whose strongest passion is so connected with the general good that for him virtue is in almost every case a matter of necessity." Hence our passions must be, not constrained, but educated: education and consequently legislation are all-powerful, since all men are born with the same physical constitution. To previous bad education and legislation are due the prevailing vices and excessive inequality in the distribution of wealth. Helvetius is thus in some respects a forerunner of modern utilitarianism and hedonism. "This man," Madame du Deffand used to say, "has told everybody's secret."

[See reference to Helvetius in Dugald Stewart, *Lectures on Pol. Econ.*, ed. 1856, vol. ii. p. 390; and in Rae, *Life of Adam Smith*, p. 200.]

E. Ca.

HENLEY, WALTER OF (c. 1200-1250). The only internal evidence which the treatise of *Husbandry* affords regarding its author is the incidental statement that he had served the office of bailiff. The title of a Cambridge MS. (Univ. Lib. Dd., vii. 6) gives the additional information that he was a knight and subsequently became a Dominican. It appears probable that he flourished in the time of Henry III., and wrote the interesting tract on estate management and the practice of farming which bears his name. It was the best known of several treatises on this subject which were written in England at this time, in Norman French: they are a remarkable group, more especially as there does not seem to be any corresponding literature of the kind at this date in other parts of Christendom. Transcribers were sometimes guilty of making curious confusions among, and rearrangements of these books, but they have been separated out, and translated by Miss Lamond, as Walter of Henley's *Husbandry*, *Seneschaucie*, an anonymous *Husbandry*, and Grosseteste's *Rules*. Walter of Henley's treatise survives in a large number of MSS.,—besides the twenty-one examples enumerated in the Introduction to Royal Historical Society edition, there is a copy in Corpus Library at Cambridge. The book was evidently much used as a handbook, and it was found in many monastic libraries. Several copies of it were made at Christ Church, Canterbury, and one, of a somewhat different text, at St. Augustine's. It held its own as the standard treatise on agriculture till the 16th century, when it was superseded by the work of Sir A. FITZHERBERT, who treated similar topics, but—despite the commonly expressed opinion to the contrary—in all

probability independently. The treatise renders many points of mediæval agriculture clear, e.g. the relative expense of cultivation on the THREE FIELD and TWO FIELD system; the practical hints which it gives, are a great assistance to any one who is anxious to get a clear understanding of the tillage of former days. W. C.

HENRY OF GHENT. See GHENT, HENRY OF.

HERBERT, CLAUDE-JACQUES (1700-1758), farmer-general of the royal mail coaches, mentioned by Adam Smith as a "very faithful, diligent, and laborious collector" of the prices of corn, has sometimes been credited as being the first in date of the advocates of free trade in corn in France. He himself lays no claim to such priority, and in his anonymous *Essai sur la police des grains* (London 1754, Berlin 1755, the London edition is incomplete), he expressly states that the same views had been entertained so far back as 1695 by Boisguillebert in his *Détail de la France*, and, closer to his own time, in 1748 in a *Mémoire sur les Bleds* (vide DUPIN). Herbert belongs to the physiocratic school ("All the goods we possess flow from the cultivation of land," p. 2, Berlin edition). His main argument is that free trade in corn will develop the growing of corn. "It is not the obstinate storing of our corn, but its successive and annual production which will feed us. . . . Cultivation is the inexhaustible stock of our supply" (pp. 104 and 105). He rejects, as leading to jobbery, the system of "permissions to export and the erection of store-houses, either by government or by companies." Opposed to import duties, he admits a sort of sliding scale of export duties, which will be "a sufficient counterpoise to keep corn within the kingdom in case of need" (p. 192).

Barbier (*Dict. des Anonymes*) ascribes also to Herbert the authorship of a pamphlet of sixty pages, *Observations sur la Liberté du Commerce des Grains*, which was published the year after his death. The internal evidence renders this rather doubtful.

E. Ca.

HEREDITAMENT. An expression used in legal documents for any real property whether consisting of land, buildings, or rights attaching to land (e.g. advowsons, rights of common, etc.) The latter are called "incorporeal" hereditaments.

E. S.

HEREDITAS, the entire property of a deceased person, to which his universal successor or *heres* succeeded, whether under a will or *ab intestato*. The *heres*, as successor to the deceased, was liable for his debts. E. A. W.

HEREDITY. The persistence of the same character through many generations of a family or a people is a fact often observed and of the utmost importance for economics. The persistence of a peculiar artistic faculty has been preserved to some cities, e.g. to Lyons, the supremacy in certain manufactures, which, so far as external

conditions are concerned, might have flourished equally well in many other places. The persistence of financial skill has made the Jews everywhere the bankers of hostile races and creeds. Persistent energy has made Holland and Lancashire rich; persistent idleness has made Naples and Andalusia poor. The principal causes of this permanence of character are not hard to find. They appear to be four—blood, education, civilisation, and natural environment. As to the first, only physical science can attempt to determine the extent to which physical peculiarities—above all, peculiarities of the brain and the nervous system, are transmitted from one generation to another. Even now there is no agreement among experts as to the mode or extent of such transmission. That it does take place somehow or other few men of common sense will doubt. But it is not only in giving the child a certain physical constitution that the parents' influence on its character and intelligence are so momentous. Education in that larger sense which includes the modelling of feelings, habits, and occupations has always been, and must continue to be, for the most part the work of the father and mother. Although the formal division of castes is unknown in Europe, most occupations are to a great extent hereditary. The child imitates the parent. The parent finds it easier to train his child to his own calling than to any other. To the child the parent imparts much useful knowledge which could not be learnt at school, and many habitual aptitudes indispensable for success in any calling. It thus becomes impossible to compute how much of the child's resemblance to the parent is due to strictly physical causes; how much to subsequent educational influence. Again it is not merely parentage or education, but also inherited civilisation, which contributes to mould the individual on the pattern of his ancestors. An old and deep-rooted civilisation exercises the most penetrating power on all who come within its sphere, whether by birth or by immigration, whether as conquerors or as subjects. Thus successive races of invaders have been permeated by the civilisation of Italy and China, and the older types of thought have endured in spite of infusions of alien blood. Lastly, the effect of natural environment, the conditions of soil, scenery, and above all, climate, tend to maintain physical and moral uniformity through age after age, and favour the illusion that the present inhabitants of a given country are all lineal descendants of those who inhabited it in the earliest period of history. These natural agencies have no doubt contributed much to the assimilation of foreign conquerors by the conquered natives. The joint influence of a peculiar climate and a peculiar civilisation in rendering men subjected to their action like one another and unlike everybody else is well

illustrated in the United States of America. The mixed crowd of European immigrants who disembark every year on the shores of the United States are rapidly transformed into the likeness of the older settlers, and their offspring can hardly be distinguished from the offspring of three or four generations of American citizens. But the pure-blooded Yankee who is proud of his descent from the Puritans is a very different man from his English ancestor or cousin. The converse truth is illustrated by the remarkable transformation which many races have undergone when removed to a new home and exposed to new influences. Thus the Jews in their own country were mainly an agricultural and pastoral people; since their dispersion they have lived chiefly in towns and have busied themselves in trading and money-lending. It thus appears that the continuity of national character is the result in varying proportions of unbroken descent by blood, of education, of inherited civilisation, and of unchanged natural conditions. The relative potency of these agencies in any given instance may be roughly conjectured, but can never be exactly determined. Such determination is not, however, necessary for economic purposes. It is enough for economical investigation to know that tribes and nations have certain striking characteristics which may indeed be modified in the long lapse of time or by violent revolutions, but which are in the main permanent. It should, however, be remembered that this permanence is not the same in every stage of civilisation. It is most conspicuous in the earlier, the tribal or at most the national stage. It is less conspicuous in the later, the cosmopolitan stage. Thus in the ancient world the hereditary peculiarities of the Greek and the Jew, the Phœnician and the Roman, the Gaul and the Egyptian, were all strongly marked, whilst they retained their independence, but became somewhat blurred when they were merged in one universal empire. At the present day the different nations of Europe impart to each other their arts, their discoveries, their inventions, their luxuries, and their vices. Each people learns something from its neighbours and abates something of its own peculiarities. But this process of assimilation is in great measure superficial, and leaves the hereditary distinctions of temperament and character almost unchanged.

[F. Galton, *Hereditary Genius; Natural Inheritance*.—E. B. Poulton, *Theories of Heredity*.—Weissmann, *Essays upon Heredity and Kindred Biological Subjects*.—Kindere, *De la Race et de sa part d'influence dans les diverses manifestations de l'activité des peuples*.—Ribot, *Heredity, a Psychological Study of its Phenomena, Laws, Causes, and Consequences*.—J. B. Haycraft, *Darwinism and Race Progress* (1895).] F. C. M.

HERIOT. When a geisich or thegn received a grant of BOCLAND (*q.v.*) it was customary for

the lord to make him a gift of arms and equipment. On the thegn's death this gift was repaid in whole or part from his chattels by the heir, and this repayment, at first customary and then compulsory, is called the heriot. The Norman lawyers confused the heriot with the feudal relief, which was paid by the heir on succeeding to his father's lands. But the two things are perfectly distinct. The relief is directly connected with the tenure of land; until it is paid the estate returns to the overlord, who only grants possession to the heir when the customary payment has been paid. But the heriot has no connection with the land, which passes unconditionally to the heir. It is in fact not so much a charge upon the heir as a payment from the dead man to his lord.

[Stubbs, *Constitutional History*, i. 261.] E. L.

Heriot still survives as a manorial right subsisting on copyhold land in many parts of England, and also in certain places, more particularly in Kent, on freehold land held of a manor. It consists in the right of the lord, on the death of a tenant, and in some cases also on alienation, to seize the best beast, e.g. a valuable race-horse, on every tenement held by such tenants. On some manors the best chattel, e.g. a diamond necklace, may be taken by the lord. It is frequently difficult to ascertain whether land is subject to heriots or not, as the occasions for making use of the right may only occur at long intervals; and, as the statute of limitations, though it could bar a particular exercise of the right of heriot, could not bar the general right (see *Zouche v. Dalbiac*, L. R. 10 Ex. 172), a continuous non-exercise of the right would, however, tend to extinguish it. The compulsory extinguishment of heriots may, under § 7 of the Copyhold Act 1837, be claimed either by the lord or the tenant, and the compensation payable to the lord is, in such a case, ascertained in the same way as in the case of the enfranchisement of copyhold land.

Heriots, though a picturesque reminder of a past age, have nothing in their favour from an economical point of view. They cause an inconvenience to the tenant out of proportion to the advantage they confer on the lord; their real or assumed existence frequently creates difficulties on the sale of land, and, in many instances, they have caused fruitless and expensive litigation. It would be most desirable for the legislature to fix a period within which compensation for them and similar manorial rights might be claimed by the lords, and to declare that after the lapse of such period all such rights should cease.

[As to the present law relating to heriots, see Elton, *Copyholds*, 2nd edition, 198-210.] E. S.

HERITABLE AND MOVEABLE (Scots Law). Correspond very nearly, with some exceptions, such as teinds or tithes, liferents or estates for life in land, mortgage debts, and

others, to real and personal as applied to property in English law, particularly with reference to the respective rights of the heir and the personal representative. In Scots law there are, however, more numerous instances than in English in which property is considered heritable (or real) for one purpose and moveable (or personal) for others: and there are some leading differences of principle, such as that rights in their own nature moveable, but having a tract (or prospective course) of future time, as for example, leases, annuities, and life interests in money, are heritable, and not moveable or personal only.

[For enumerations of heritable and moveable rights, see Bell's *Commentaries*, vol. ii. p. 1, et seq.] A. D.

HERITABLE SECURITIES (Scots Law).

A generic term, including all forms of real securities, or securities on land or buildings. The most ordinary form in use is a bond and disposition in security, a combination of a personal bond with a redeemable conveyance or mortgage, with power of sale by public auction and of granting an absolute title upon such sale.

[See Craigie's *Digest of Scottish Conveyancing (Heritable)*.] A. D.

HERMANN, FRIEDRICH BENEDICT WILHELM (1795-1868), one of the most eminent of German economists and statisticians, was born at Dinkelsbühl in Bavaria. He studied at Erlangen and Würzburg. He was afterwards (1821) teacher of mathematics at Erlangen, and (1825) professor of that science in the Polytechnic school of Nuremberg. In 1827 he was appointed extraordinary professor of technology and political economy in the university of Munich. His great work, *Staatswirtschaftliche Untersuchungen* (1832), made his reputation, and procured for him the position of ordinary professor in his university. He was employed by the government as inspector of institutions for technical instruction, and was commissioned to visit, in 1839, the Paris exhibition, of which he published an account (*Die Industrie-Ausstellung zu Paris*). He was also appointed a member of the statistical bureau, and in the capacity of its head he issued, from 1850 to 1857, his contributions to the statistics of Bavaria. He filled from time to time different important posts in the ministries of the interior and of finance. At several conferences of representatives of the German states on taxation, he worked earnestly for the creation of one national system of customs duties. He organised a *Grossdeutsche Partei*, whose motto was "Kein Deutschland ohne Oesterreich." He held that a union without Austria would produce not a lesser Germany, but a larger Prussia. He represented in 1848 the city of Munich in the National Assembly at Frankfurt, and voted as a member of the Left Centre. In 1855 he retired from political life, and devoted himself to

his professorial duties and to scientific research. He was seized with inflammation of the lungs on 20th November 1868, and, aware of his approaching end, dictated to his son, as long as his strength permitted, the alterations to be introduced into a new edition of his *Untersuchungen*. He died on the 23rd of the same month.

[Roscher, *Gesch. der N.O.*, p. 860.—Cossa, *Intro. to the study of P.E.*, English trans., Macmillan, 1893, p. 406.—Kautz, *Nationalökonomie*, ii. p. 633.] J. K. I.

Hermann in his *Staatswirthschaftliche Untersuchungen* (Munich, 1832, and, enlarged afterwards from his notes, 1870) has left one of the most permanently valuable books on economics in the German language. It covers nearly the whole ground of a text-book, and such a text-book as might have been expected a generation later. Like Schäffle, he says much at the outset on human wants, the notion of "goods," and other psychological aspects of his subject. He lays stress on the distinction of technical from economical, the first relating to the production of certain physical effects by the use of certain physical causes, the second to the disposal of quantities of goods, on the principle of greatest benefit at least sacrifice. He distinguishes the economy of an individual, of a family, and of a larger group. He points out that joint action is not necessarily collective action; a school may be started by the joint action of several fathers for the training of their own several children, but it is not a public or collective institution unless it is created by a union of citizens not specially for themselves but for the general advantage (ed. 1870, p. 95).

His illustrations from education are frequent. As a public man, he took a keen interest in public instruction. He draws also in many other ways on his special knowledge of public affairs in Prussia, and especially in Bavaria. The later edition refers in this connection to his report for the Zollverein's commission on the London Exhibition of 1851 (ed. 1870, p. 214, cp. 426, 466-467). In theory, he is a shrewd and close reasoner. He expressly adopts the abstract method (120, 168, cp. 378). He works out mainly on conservative lines the theory of value, price, demand, etc. He thinks income of consumers is the true wages-fund. He has a wide knowledge even of the minor English and American economists (e.g. 203, 259, 266). Some of his distinctions are not perhaps very happy. For example *Nutz-capital*, as distinguished from *Productiv-capital* (221 seq.), is on the whole a metaphor, and not to be embraced with the latter under one definition of capital. The distinction, again, of *Hilfsstoff* from *Hauptstoff* (320) seems rather technical than economical. But, open him where you will, you find mature wisdom and clear reasoning.

Banfield, in his *Organization of Industry* (1845), acknowledges his debt to Hermann (e.g.

Preface and pp. 20, 28). But Banfield, who had studied Rau, Von Thünen, and List, had special opportunities in his own travels, official and unofficial, of knowing the Germans. Hermann had little further notice, till Professor Marshall, in his *Principles* (1890), made him full amends for previous English neglect (see esp. p. 106 n., 492, etc.) [see also BANFIELD; GERMAN SCHOOL]. J. B.

HERRENSCHWAND (—). This writer on political economy has often been mistaken for his brother Johann Friedrich, a Swiss physician, who died in Bern in 1796. He is believed to have been a judge in the Swiss regiments in the French service, and according to the *Nouvelle Biographie Générale* (vol. 24, p. 463) was in 1805 an old man living in Paris. Nothing else is known about him.

He is a turgid and diffuse writer, always professing to set forth the will of the "Creator," or of the "Universe." Blanqui in the bibliography annexed to his *Histoire de l'Économie Politique* (ii. p. 350, ed. 1860) mentions him as a connecting link between Quesnay and Smith. In common with the former, Herrenschwand has a general predilection for agriculture and a state of equilibrium between production and consumption; and in common with the second, he remarks on the beneficial influence of high wages, but his opinions on the evils of foreign trade, and on the usefulness of the accumulation of the precious metals, are quite contrary to their views. His favourite remedy is the multiplication of absolutely independent consumers (*consommateurs indépendants par excellence*), and the increase in their hands of coined precious metals (*Du vrai Gouvernement des Peuples de la Terre*, London and Paris, 1801-1802, p. 89).

His works, although written in French, were published in London; *De l'Économie Politique Moderne. Discours fondamental sur la Population* (London, 1786, and Paris, 1795).—*Discours sur le Crédit Public des Nations de l'Europe* (1786).—*Discours sur la Division des Terres* (1788).—*De l'Économie Politique et Morale de l'Espèce Humaine* (2 vols., 1786).—*Du vrai Principe actif de l'Économie Politique* (1797). Arthur Young, *Travels through France* (2nd ed. vol. i. p. 481), writing on his own studies and those of Sir James Stuart, on the subject of "Population," refers thus to Herrenschwand; "other writers have arisen who have viewed the subject in its right light; and of these none have equalled Mons. Herrenschwandt, who in his *Économie Politique Moderne*, 1786; and his *Discours sur la Division des Terres*, 1788, has almost exhausted the subject." E. Ca.

HERRERA, CRISTOBAL PEREZ DE (end of 16th and early 17th century), physician of the royal navy of Spain and of Philip II., wrote several works on the poor, among which may be mentioned his several *Discursos del Amparo de los legítimos Pobres* (Discourses on the Pro-

tection of the well-conducted Poor), Madrid, 1595, 1598, and 1608. He recommends the erection of special houses (*Albergues*), which are to be supported by the church, the municipal authorities, and private charity; but unlike his predecessor GIGINTA (*q.v.*), he does not in his *Replica* (Reply) to the objections opposed to his discourses, appear to be willing to enforce work on the well-conducted poor, and only considers it as a mode of correction for vagrants and women of bad character; he would even allow the well-conducted poor, whilst inmates of the house, to go out begging on their own account.

More favourable to Herrera's endeavours than to Giginta's, King Philip III. in 1596, ordered, his plan to be executed in fifty towns and rural places; but owing probably to the absence of the test of work suggested by Giginta, its effects were rather favourable to than restrictive of the extension of pauperism.

[Colmeiro, *Historia de la Economía Política en España* (vol. ii. pp. 29 and 38), *Biblioteca de los Economistas Españoles* (p. 135).—Iglesias, *La Beneficencia en España* (vol. i. p. 257).] E. ca.

HERRIES, JOHN CHARLES (1778-1855), statesman and financier, was the son of a London merchant. In 1798 he entered the public service as junior clerk in the treasury, but was soon promoted to a place in the revenue department, where he so distinguished himself that Pitt employed him to draw up his counter-resolutions against Tierney's financial proposals. He further received the thanks of the prime minister in 1803 for his pamphlet in reply to the financial strictures of Cobbett and Lord Grenville. Herries acted for some time as secretary to Vansittart, and afterwards to Spencer Perceval, and in 1811 he was despatched to Ireland to assist Wellesley-Pole, the Irish chancellor of the exchequer. The same year he was appointed to the arduous office of commissary-in-chief, in which post he did much to cope with the jobbery everywhere prevalent. He had now a great reputation as a political economist, and in 1813, in conjunction with Nathan Meyer Rothschild, he succeeded in carrying out a plan for the collection of French specie for the use of Wellington's army. But owing to the continued dearth of specie in 1815, a large number of 20-franc pieces were, at Herries's suggestion, coined at the mint for the use of the army. The office of commissary-in-chief having been abolished in 1816, Herries retired on a pension; but he was soon appointed to the new office of auditor of the civil list. In 1821 he was appointed one of the commissioners for inquiring into the collection and management of the revenue in Ireland. He was named financial secretary to the treasury in 1823, being returned to parliament during the same year for Harwich. It was under his direction that the consolidation of the customs laws was

effected. When Lord Goderich (Earl of Ripon), became prime minister on the death of Canning, Herries was appointed chancellor of the exchequer at the king's special request. Ministerial complications ensued, the result of which was that Herries left the exchequer and became master of the mint. He served on the finance committee of 1828, and was the first financier to "make the public accounts intelligible." In 1830 he became president of the board of trade, but resigned both his offices when Lord Grey acceded to office. In the session of 1832 Herries made a severe and damaging attack upon the government in connection with the Russian-Dutch loan. He was secretary at war in Peel's ministry of 1834-35. Appointed in 1838 one of the committee on metropolitan improvements, he drew up the greater portion of its second report. He strongly attacked the financial and commercial policy of the Whig government in 1841, but the same year lost his seat in the house. Having retired from Harwich at the dissolution, he unsuccessfully contested Ipswich. He now remained out of parliament for six years. Returned in 1847 for Stamford in the protectionist interest, he strongly opposed the repeal of the navigation laws. In the Derby ministry of 1852 he held the office of president of the board of control, but that ministry was overthrown in December (1852), and in the ensuing year Herries retired altogether from parliamentary life. Herries was not a great statesman or a brilliant speaker, but he acquired the reputation of an able financier and an assiduous public servant.

[E. Herries, *Memoir of the Public Life of J. C. Herries*.—Bulwer, *Life of Lord Palmerston*.—Walpole, *History of England*.—*Annual Register*, 1855.—Art. "Herries, J. C.," *Dictionary of National Biography*.]

Herries has recently been appealed to by Mr. W. H. Smith, Mr. Gladstone, and Sir. W. Harcourt, as an authority upon the probability of panic in the event of bimetallicism. Mr. Arthur Balfour expressed a very different view of his abilities. "Speech at Bimetallic Conference," London, 1895.] G. B. S.

HEUSCHLING, PHILIPP F. XAVIER THEODORE (1802-1883). An eminent official of the ministry of the interior in Brussels, was a frequent contributor on statistical subjects to the *Journal des Economistes*.—*La Belgique Judiciaire*.—*Revue de l'Administration et du Droit Administratif en Belgique*.—*Bulletin de la Commission de Statistique de Belgique*, etc.

The list of his publications extends over three pages of the Belgian *Bibliographie Nationale* (Brussels, 2 vols. 1888). Among them ought to be mentioned: *Essai sur la Statistique générale de la Belgique* (1838).—*Bibliographie historique de la Statistique en Allemagne* (1845).—*Manuel de Statistique ethnographique universelle* (1847).—*Le Congrès Général de Statistique tenu à Bruxelles en 1853* (Paris, 1853).—*Résumé de la Statistique*

Général de Belgique de 1841 à 1850 (1853).—*L'Empire de Turquie* (1860). He wrote in conjunction with M. Block: *Das Kaiserthum Frankreich und das Königreich Belgien* (Leipzig, 1871), and collected under the title of *L'Impôt sur le Revenu* (1873), several of his scattered pamphlets and review articles advocating an income tax to take the place of indirect taxation and license duties (*patentes*). He assisted QUETELET (*q.v.*) in the publication of the *Comptes Rendus des Travaux de la Commission Centrale de Statistique*, and Bivort in bringing out the *Annales Législatives de la Belgique*, and trans. *Princ. of Stat.* of B. HILDEBRAND (*q.v.*). E. Ca.

HEYSHAM, JOHN, M.D. Edin. (1753-1834), is best known through his statistical observations, extending from 1779 to 1787, on the bills of mortality at Carlisle, in which town he followed his profession of physician. His tables include the number of deaths according to age, sex, and conjugal condition, and are accompanied by general observations on the vital statistics of Carlisle, including some remarks, with statistical illustrations, concerning the value of inoculating for smallpox. His figures formed the basis of Joshua Milne's *Carlisle Life Table*, which from its greater accuracy very generally superseded the Northampton table previously used, though the mortality at Carlisle was somewhat lower than that of England. Heysham took a census of the town in 1780 and in 1788, and calls attention to the large increase in the number of the inhabitants, due to manufactories.

An abridgment of *Observations on the Bills of Mortality in Carlisle 1779-87*, Carlisle, 1797.—*An Account of the Jail Fever at Carlisle in 1781*. Lond., 1782.

[Dr. H. Lonsdale, *Life of John Heysham*, M.D., Lond., 1870.—Concerning the Carlisle Table, see also Joshua Milne, *Treatise on the Valuation of Annuities*, 2 vols., Lond., 1815, and C. Walford, *Insurance Cyclopædia*, s.v. *Carlisle Table of Mortality*, Lond., 1871.] R. H. H.

HIDAGE. The earliest tax in English history, the DANEGELD (*q.v.*), was a tax of a varying number of shillings on the hide of land. The original reason for this imposition was to buy off the Danish invasions under Ethelred II. But long after this pretext had disappeared, even after the Norman Conquest, the danegeld continued to be levied from time to time under the same name. But after 1163 it disappears from the rolls, and historians have often supposed that it was never again levied. But precisely the same charge on land continues to be made by Henry II. and Richard I. under the name of hidage, and in the 13th century as carucage. Hidage therefore is really the same as danegeld, though it only appears as a technical term after the latter had fallen into disuse. R. L.

HIDE. In the original distribution of land among the English settlers in Britain the

portion allotted to each free man, *i.e.* the homestead with a share in the arable and pasture lands of the township (see ALOD), was called a hide. From this use came its later meaning as a measure of area. By the laws of Edward the Elder a ceorl who had fully five hides of land with other qualifications could become a thegn. But it is impossible to determine the measurement denoted by a hide in Anglo-Saxon times, and it is certain that this varied very much in different localities. After the Norman Conquest a hide means the same as a carucate, *i.e.* the land that can be ploughed by a single team. This, originally a varying area, is fixed in the twelfth century at 100 or 120 acres.

[Kemble, *Saxons in England*, i. 88.—*Dialogus de Scaccario*, i. 17.—E. W. Robertson, *Historical Essays*.—Stubbs, *Constitutional History*, i. 74.]

R. L.

The *hide* or *higid* appears to have meant, in primitive times, the amount of land which sufficed for a family; it consisted of arable land with pasture rights, and has been generally regarded as the share allotted to each free warrior (ALOD). Charters quoted by Mr. Round seem to prove that the hide was an area of 120 acres.

In Domesday Book the term is used as a unit of assessment for purposes of calculating the Danegeld. Like the term *carucate* (properly 160 or 180 acres, see CARUCAGE) it ceases, in this great record, to be a direct measure of area; for a large expanse of barren heath, and a comparatively small but fertile arable holding, might each be rated as a hide. The principle of *beneficial hidation*, or the favourable rating of certain estates or districts (as *e.g.* the archiepiscopal land in Surrey) was so far operative that it is quite impossible to deduce the area of an estate from the Domesday hides.

HIGGLING of the market is described by Adam Smith as a process by which "exchangeable value" is adjusted to its measure "quantity of labour."

"It is often difficult to ascertain the proportion between two different quantities of labour . . . it is not easy to find any accurate measure either of hardship or ingenuity. In exchanging, indeed, the different productions of different sorts of labour for one another, some allowance is commonly made for both. It is adjusted, however, not by any accurate measure, but by the higgling and bargaining of the market, according to that rough equality which, though not exact, is sufficient for carrying on the business of common life" (*Wealth of Nations*, bk. i. ch. v.).

Compare FLEEMING JENKIN: "The higgling of the market, ascertaining the result of the relative demand and supply in that market, does not in the long run determine the price of either eggs or tea; it simply finds out the price which had

been already determined by quite different means" ("Time - Labour System," *Papers, Literary, Scientific*, etc., p. 139). It is possible to accept the writer's account of the *market process* (*Ibid.* p. 123) without contrasting so strongly the determination of price by demand and supply and by cost of production (cp. Prof. Marshall, *Principles*, Preface, p. xi.). Prof. Marshall at the beginning, when treating of the theory of the equilibrium of demand and supply, gives an excellent type of the action of a market (*Ibid.* bk. v. § 2). See also his note on barter at the end of the chapter referred to, and his mathematical note xii. The subject can hardly be apprehended without mathematical conceptions. Thus Mill, in his description of the play of demand and supply (*Pol. Econ.*, bk. iii. ch. ii. § 4), in the absence of the idea of a demand-curve or function, may seem to use the phrases "demand increases," "demand diminishes," loosely. A more distinct idea is thus expressed by Fleeming Jenkin in his *Graphic Representations*. "If every man were openly to write down beforehand exactly what he would sell or buy at each price, the market price might be computed immediately." A similar idea is presented by Prof. Walras (*Éléments d'Économie Pure*, art. 50). In some later passages he has formulated the higgling of the market more elaborately. The present writer, criticising these passages (*Revue d'Économie politique*, Jan. 1891), has maintained that even if the dispositions of all the parties were known beforehand, there could be predicted only the position of equilibrium, not the particular course by which it is reached. Of course special observation may supply the defects of theory. For instance there may be evidence of the incident which Cantillon attributes to the "altercation" of a market, namely the predominant influence of a few buyers or sellers; "le prix réglé par quelques uns est ordinairement suivi par les autres" (*Essai*, part ii. ch. ii. Des prix des Marchés). Compare Condillac: "Aussitôt que quelques uns seront d'accord sur la proportion à suivre dans leurs échanges les autres prendront cette proportion pour règle" (*Le Commerce et le Gouvernement*, ch. iv. Des marchés).

"Higgling" is not always qualified as "of a market." The term may be used in much the same sense as the "art of bargaining" is used by Jevons, with reference to a transaction between two individuals, in the absence of competition (*Theory*, p. 124, 3rd ed.). Thus Professor Marshall, in an important passage relating to the case in which agents of production are held by two monopolists, says that there is "nothing but 'higgling and bargaining'" to settle the proportions in which a certain surplus will be divided between the two (*Principles of Economics*, bk. v. ch. x. end). Moses, in the *Vicar of Wakefield*, did not require a fair for the exercise of the skill

which is thus attributed to him: "He always stands out and higgles and actually tires them till he gets a bargain." F. Y. E.

HIGHWAY RATES. See RATES.

HILDEBRAND, BRUNO (1812-1878), a German economist of the historical school who won an enviable reputation among his contemporaries by his scholarly contributions to the science, and especially by a rare administrative power that found its happiest expression in the establishment and editorial management of the *Jahrbücher für Nationalökonomie und Statistik*, was born at Naumburg, a small town on the Saale river, where his father was clerk of the court. In 1836 he began an academic career as privatdozent or lecturer in history at the university of Breslau. Like G. Kries and Carl Kries, however, he soon specialised in political economy. The instructorship developed three years later into an assistant professorship, and in 1841 Hildebrand was made full professor of political science at the university of Marburg. While in this position he represented Marburg in the Paulskirche Conference at Frankfurt, and in 1849-50 he sat as representative for the city of Bockenheim in the Hessian parliament. It was in this latter body in September 1850 that Hildebrand moved and carried a motion to refuse the additional grants asked for by the government in the annual budget. A dissolution of the House followed and Hildebrand lost his position as professor at Marburg in consequence of his action. He then went to Switzerland and was made professor of political science, first at Zurich and then at Berne, where he founded the first cantonal statistical bureau. In 1861 he was called to the chair of political economy at the university of Jena, where he remained until his death. It was here that he started the publication of the *Jahrbücher*, which he edited alone until 1873, when Prof. Johann Conrad, a former pupil, became associate editor. Prof. Conrad succeeded to the chief editorship in 1878. In 1864 Hildebrand was made director of the statistical bureau of the United Thuringian States, in which position he published many valuable statistical researches. His chief work, however, was his book entitled "Political Economy of the present and future" *Die Nationalökonomie der Gegenwart und Zukunft*, the first volume of which appeared in 1848. Much material on the industrial condition of labour and manufactures, gathered during a long stay in England in 1846, was utilised in this work. He criticises the different schools from the historical point of view and treats the laws of economic development in modern times ethically and politically. Perhaps his best and severest criticisms are those of Engels, Proudhon, and the theoretical parts of Fried. List's doctrines, although Hildebrand was himself a moderate protectionist. In spite of the fact that this book was welcomed as an

important contribution to that stream of literature begun by the historical school, a second volume never appeared, possibly because of disinclination to go further on the same lines, but more probably because of absorption in more practical work.

Hildebrand was a man of great energy and organising power, with a good hold on practical life, and always successful in collecting economic facts from all classes of people. His practical activity occupied itself in the organisation of two small railways in Zurich and Bern, and of a short railway in the Saale valley starting from Jena. He also established several friendly societies in the towns in which he lived. As a university lecturer he was not particularly brilliant, in the form or contents of his lectures; he usually spoke without notes and in a somewhat disconnected manner, but he laid great stress upon personal work with his students, and his influence on them, especially by way of suggestion and supervision, was peculiarly successful. Criticism and the development of a critical spirit among his students was ever with him a hobby. His chief writings in the order of their appearance are as follows:

Xenophonitis et Aristotelis de œconomia publica doctrinæ illustratæ, 2 Teile, Marburg, 1845.—*Die Nationalökonomie der Gegenwart und Zukunft*, I (einziger) Bd. Frankfurt a. M. 1848.—*Statistische Mitteilungen über die volkswirtschaftlichen Zustände Kurhessens*, Berlin, 1853.—*Beiträge zur Statistik des Kantons Bern*. Bd. I. 1 Hälfte, Bern, 1860.—*Die Kurhessische Finanzverwaltung*, Kassel, 1860.—*Untersuchungen über die Bevölkerung des alten Italiens (Artikel im Neuen Schweizerischen Museum, 1861.)*—*De antiquissima agrî romanæ distributionis fide*, Jena, 1862.—*Statistik Thüringens, Mitteilungen des statist. Bureau Vereinigter Thüringischer Staaten*, 2 Bde, Jena, 1867-78.—*Principes de statistique administrative, enseignés à l'Université de Jena. Traduit de l'allemand sur les cahiers du professeur et résumés par X. Heuschling*, Brussels and Paris, 1872. [This was an unauthorised translation of a college student's note book which appeared in the *Bulletin de la Commission centrale de statistique*, vol. xii.]

Many valuable articles upon various economic topics in his *Jahrbücher*. S. M'C. L.

HILDRETH, RICHARD (1807-1867), was born in Deerfield, Mass.; he became a lawyer and editor in Boston, and was the author of a standard history of the United States. He published many works on history and moral and political philosophy, among which is, *The History of Banks, to which is added a Demonstration of the Advantage and Necessity of free Competition in the Business of Banking*, Boston, 1837, pp. 142. Hildreth argued that bank-notes should be subject to the same kind of legislation as bills of exchange. D. R. D.

HILL, SIR ROWLAND (1795-1879), was the founder of penny postage in England. In 1819 he established Hazelwood School, near

Birmingham, and in 1822 brought out, in conjunction with his brother, Matthew Davenport Hill, a treatise on public education. With the hope that the government might be induced to examine into the home colonies of Holland, which seemed to afford valuable suggestions for our own poor-law administration, he wrote a pamphlet on *Home Colonies* in 1832. In 1835 he was appointed secretary to the commissioners for the colonisation of South Australia, and in that capacity suggested a plan for municipal government which is believed to contain the first scheme ever put forward for proportional representation. In 1837 his pamphlet appeared on *Post Office Reform: its Importance and Practicability*, urging the substitution of a uniform charge—preferably the minimum then in use, one penny—for the complicated system of "rating" then practised. This led to considerable popular agitation, which induced the government to appoint a committee of enquiry in 1838, and to introduce a Penny Postage Bill in 1838, going into effect in 1840. To assist in carrying out the contemplated reforms, Hill was appointed in 1839 to a position in the Treasury. The term for which he was appointed having expired, he was dismissed by the new ministry in 1842; and thereupon turned his attention to railway management, as director and then chairman of the Brighton Company (1843-1846). In 1846 a national testimonial was presented to him in recognition of his services in postal reform, together with a subscription of £13,000. In the same year he was appointed to the newly-created office of secretary to the postmaster-general. In 1854 this office was combined in his person with the older office of secretary to the general post office; and he remained sole secretary till his resignation in 1864. He had been knighted in 1860; and on his retirement received a parliamentary grant of £20,000. He was buried in Westminster Abbey.

The principles of the modern postal service are so far-reaching that it may be well to state them in Rowland Hill's own words. His attention, he tells us in his autobiography, was first directed to the subject by his interest in the problems of taxation. He had come to the conclusion that the best tax was that whereof "the productiveness kept pace with the increasing number and prosperity of the nation." "This test brought the tax on the transmission of letters into bad pre-eminence, since during the previous twenty years the revenue derived from the post office . . . had even somewhat diminished." The suggestion, which he attributes to his father, Thomas Wright Hill, that "even for fiscal purposes postage was unwisely high," then occurred to him; and he "started" upon his work of investigation "with the simple notion that rates must be reduced." "The question to be decided therefore was, how far the total reduction might safely be carried; and this involved two preliminary in-

quiries; first, what would be the probable increase of correspondence consequent upon such or such reduction; secondly, what would be the augmentation of expense consequent upon such increase." As to the first he concluded from an observation of the cases of several commodities, not only that cheapening was followed by an increase in demand, but that "reduction in price, even if it does not increase the total expenditure on the article, seldom if ever permanently lowers its amount." As to the second, he saw that under the existing system many of the elements of expense "must increase in something like direct proportion to increase in the number of letters." But this he thought by no means necessary; expense could be effectually reduced by simplicity of operation, and this could be obtained by "reducing the prodigious variety of rates, and adopting means to induce prepayment." "In considering how far the variety of rates might be reduced, I was led to inquire what proportion of postal expense proceeded from the conveyance of letters from town to town, and further how far such expense varied in relation to distance." "I found, first, that the cost of conveying a letter between post-town and post-town was exceedingly small; secondly, that it had but little relation to distance; and thirdly, that it depended much upon the number of letters conveyed by the particular mail; and as the cost per letter would diminish with every increase in number, and such increase would certainly follow reduction of postage, it followed that, if a great reduction could be effected, the cost of conveyance per letter might be deemed absolutely insignificant. Hence I came to the conclusion that the practice of regulating the amount of postage by the distance over which a letter was conveyed . . . had no foundation in principle; and that consequently the rates of postage should be irrespective of distance. This discovery, as startling to myself as it could be to any one else, was the basis of the plan which has made so great a change in postal affairs" [*The Life of Sir Rowland Hill and the History of Penny Postage*, by Sir Rowland Hill and his nephew G. B. Hill, 1880].

[Bastable, *Finance*, 1903, bk. ii. ch. iii. §§ 7, 8.]

W. J. A.

HILL-BURTON, JOHN, also known as BURTON, JOHN HILL (1809-1881), born at Aberdeen, was educated at Aberdeen university, and after trying in vain to practise at the Edinburgh bar, became a writer for the *Westminster and Edinburgh Review*. He helped Sir J. Bowring to edit Bentham's works. His first notable writing, if we except *Benthamiana*, 1843, is his *Life of Hume*, 1846, and *Letters of Eminent Persons to David Hume*, 1849. He edited the autobiography of Carlyle of Inveresk, 1860. His *Biographies of Lord Lovat and Duncan Forbes*, 1847, may be said to have given a foretaste of his *History of Scotland*, 1853, seq. which has the signal merits of being faithful to the sources, and thorough, candid, and judicial in the examination of them.

Hill-Burton's chief economical book is *Political and Social Economy, and its Practical Appli-*

cations (Chambers, Edinburgh, 1849). He addresses himself to a supposed need of "the acting and thinking man," to have the true political economy set before him as concretely and as attractively as the false, which was just then, through Louis Blanc and others, neglecting no means of making itself known. He had long hoped to write such a book, and on a larger scale than time now allowed him.

The book deals with applications and illustrations rather than first principles; and it bears the marks of a time of transition. The writer stands midway between two epochs, and describes both, with no very distinct consciousness that the old political economy like the old régime is giving place to a new. He mentions Mill's *Principles*, 1848, with respect, but in a tone of disappointment (p. 42). He finds Mill's discussion of luxuries, for example, inadequate. On the other hand he himself states the WAGES FUND theory, without any misgivings (p. 54). His first section on production is largely a plea for piece-work against time-work. He quotes Thiers against the French socialists on the rights of property (p. 60). His quotation of the remark that there must always be a worst-paid industry (p. 29), does not lead him to any innovations in theory. His allusions to current events, railways, colonies, pauperism, and epidemics, help to make his book at once readable and historically valuable, as enabling us to place ourselves at the point of view of an intelligent English citizen forty-five years ago.

Otherwise it is far inferior in interest to his historical works, and has little or nothing of the charm of his literary masterpiece, *The Book-Hunter*, 1860. It is perhaps not too much to say that he is of most service to economists when he is not writing directly on their subject.

Clear and wise as are the chapters of his *Emigrant's Guide*, 1851, they bear out this statement. Almost at starting he speaks of the colonists as to be "guided by the eternal laws of political economy, laws as eternal and beneficent as those of the mechanical powers and animal life, laws not easily found, often misconstrued, taxing men's intellects to the utmost, and far more liable than the laws of other sciences to the false direction of prejudice, yet existing in nature beyond doubt," *Em. G.* "Australia, etc.," part i. p. 7.

This is use and wont, and largely obsolete use and wont. There is more character in the description of those who should and those who should not emigrate, the contrasts of national character, the criticisms of Wakefield's plan of emigration (pp. 38 seq.), the sudden outburst against the tyranny of proprietors and capitalists (52), the proofs given of the necessity of the interference of the home government (73-88). The statistics of wages in the colonies, and the comments on slave compared with free labour, must also be mentioned (*Em. G.*, part ii.). "South Australia," etc. (pp. 8, 16, 25, 97, 136, 137, etc. America, p. 81, 182, 183).

But Hill-Burton is more at home in his *History of Scotland*, where his economical training often leads him to draw attention to incidents of which an ordinary historian would miss the significance.

Such are, for example, his notices in vol. ii. (2nd ed. 1873) of absentee landlords, and the effect, on

them, of an act forbidding exportation of goods or money from Scotland during war (1318), p. 306, in vol. iii. of the decreasing wealth of Scotland at the time of the Reformation, pp. 433, 448, of an early instance of a "consul" p. 438, of the currency at the end of the 15th cent., p. 441, of export duties yielding more than import, p. 448. There is no difficulty in adding to this list when we come to the later volumes. The economical element in the questions between England and Scotland when their union was discussed after James I.'s accession (vol. v. 404), and when it was arranged under Queen Anne (vol. viii. 121, 207, etc.), receives adequate though never prolix treatment.

The more laboured statement of the latter case in the special *History of Queen Anne* (1880 ed.) pp. 48 seq., does not add much that is important, though there too the historian occasionally uses the eyes and the language of the economist. See esp. vol. iii. pp. 166 seq., on scarcity of money in Ireland circa 1705, and iii. 312 on political economy as aided by statistics and "commercial book-keeping."

[*Life* by Mrs. Hill-Burton in *Book Hunter* (large paper ed. 1882).—Blackwood's *Magazine*, September 1881.—*Nat. Dict. of Biog.* (by Richard Garnett).] J. B.

HIRE is the name given to payments for the use of services or movable things other than money. In the usual economic division of income into rent of land, interest, and wages, net hire, like all other income derived from the possession of property other than land, comes under the head of interest. There is, however, an important characteristic in respect of which hire of things must be classed with rent. In the case of rent and hire, when the borrower returns the loan he returns the thing actually lent, while in the case of interest he only returns a similar thing, not the coins actually lent but similar coins. E. C.

HIRE AND PURCHASE AGREEMENTS. These agreements (of which the much-advertised purchases "on the three years hire system" are instances) are of interest to economists, as they represent a new form of credit, the application of which seems extending both in England and abroad. They are in reality purchasing agreements which stipulate the payment of the purchase price by instalments, but the purchase does not take effect until the last instalment has been paid, and in the meantime the instalments are dealt with as "rent for the hire and use" of the purchased articles. This enables the vendor to recover the goods in case of non-payment of any of the instalments without having had to go through the formality of registering a BILL OF SALE, and at the same time to retain the instalments previously paid. He is, however, exposed to the risk of the purchaser selling or pledging the goods to a third party who, if acting in good faith and without notice of the vendor's right, is entitled to treat the sale or pledge as valid (Factors Act 1889, § 2 and § 9; *Lee v. Butler* [1893] 2 Q. B. 318; *Helby v. Matthews* [1894] 2 Q. B. 262).

There is something to be said in favour of these agreements, as they enable persons of small means to purchase sewing machines or other articles producing income or reducing expenditure, but on the other hand, as they impose no immediate great sacrifice on the purchaser and therefore appear to him much more favourable than they really are, they are frequently used for the purpose of disposing of unmarketable goods or of obtaining excessive prices. The forfeiture of the instalments paid before default also causes great hardship. The abuses of the purchase and hire system seem to be specially felt in Germany; an imperial act dealing with some of them was passed in 1894.

[For a complete analysis of hire and purchase and other similar transactions and full details as to their use in Germany, see Cohn, *Die volkswirtschaftliche Bedeutung des Abzahlungsgeschäfts.*]

E. S.

HIRING. The contract of hiring (*locatio conductio*) relates either to things or services. In the case of the hiring of things the hirer is entitled to the possession of the thing for the purpose stipulated, but acquires no property in it. In the case of the hiring of services, the worker is bound to render the service within the time agreed upon, exercising a proper degree of care and diligence on the work.

[Addison on *Contracts*, 10th ed. 1903.]

J. E. C. M.

HISTORICAL METHOD. The historical method of economic study is commonly contrasted with the abstract and deductive methods. Such a contrast, however, is to some extent misleading. The study of economics might be concrete without being historical; and, on the other hand, the historical method may be to some extent deductive. The distinctive feature of the historical method is its recognition of *development* in economic life, and its consequent emphasis on the dynamical, as distinguished from the purely statical elements in industrial and commercial organisation. Such a method of study is generally concrete: for in dealing with a process of growth the interaction of the different elements of social life on one another cannot be overlooked. It is true that a certain amount of abstraction is possible even here. Particular lines of tendency may be traced in the development of industrial life, without any special attention being directed to the special circumstances of different countries or districts, or strata of society, by which the general movement is modified. Such abstraction as this is necessary in a scientific study of any kind. Indeed, even the history of a battle, or any other concrete event, is necessarily abstract, in the sense that it fastens upon certain salient features, and omits what are regarded as unessential details. And this is much more obviously the case when we are endeavouring to trace the history of a great movement, with

a view to the discovery of the broad principles by which it is governed. In this sense, then, even the historical method may be said to be to some extent abstract. Still, it may fairly enough be contrasted with the abstract method of economic study, inasmuch as the elements which the historical method omits are merely those that are regarded as too insignificant, or too limited in their sphere, to have any important influence on the concrete process of development as a whole; whereas, in the abstract method proper, the elements from which abstraction is made are sometimes confessedly of scarcely, if at all, less importance in the concrete life of a country than those to which attention is specially directed. The historical method may, therefore, be described as one particular way in which the concrete study of economics is pursued. It is not, however, the only way. The study of concrete facts at a particular time and place—*e.g.* such facts as those contained in Mr. Charles Booth's *Labour and Life of the People*—cannot properly be said to be an illustration of the historical method, except in so far as these facts are brought into comparison with corresponding facts at other times and places, so as to throw light on the process of historical development. The method of LE PLAY, on the other hand, in dealing with similar matters, is much more distinctly historical. Thus it appears that the method of economic study may be concrete without being definitely historical.

Again, the historical method is not necessarily inductive, in the sense at least in which the inductive method is sharply contrasted with the deductive. No doubt, any valuable historical generalisation must rest on a certain basis of inductive inquiry. But so also must all valuable generalisations with reference to the more statical conditions of human life. But after having, by some process of induction, reached certain general principles, the historical method, no less than the statical, may proceed largely in a deductive way. There may be laws or tendencies of historical development, as well as laws or tendencies operative under particular hypothetical conditions;¹ and if it is possible to formulate laws of the former kind, their consequences may be worked out deductively, just as the consequences of the latter kind of laws may be traced. The only qualification to this seems to be that laws of the former class are generally more complex in their character than those of the latter class; and it is more obviously necessary in the case of the former to take account of the particular

circumstances by which their action is modified. Thus on the whole it remains true that the historical method tends to be more inductive than the statical method.

The prominence which has been given to the historical method in recent times is due to a variety of causes, but chiefly to the introduction of that new view of human society which is commonly described as the organic view. The more statical method of study was introduced at a time when the physical and mathematical sciences were predominant, and when human society tended to be thought of as a more or less mechanical system. With the growth of biological science, and especially with the introduction of the theory of development, a new point of view was made possible. Society came to be regarded, not as a mechanical compound of independent elements, but as an organic unity, composed of parts vitally related to one another, and undergoing a continuous process of development. Such writers as Montesquieu, Burke, Hegel, and Comte all contributed, in different ways, to the introduction of this conception; and wherever it has been introduced, it has made the statical method of study appear inadequate.

Any attempt to balance the importance of the historical method against others would be somewhat beyond the scope of such an article as this. There can be no doubt that some of its advocates have unduly depreciated what they regarded as rival methods. The more statical and the more abstract and the more deductive methods have their own place. The historical method, however, may claim to be the most comprehensive. Other methods have a place within it, rather than it within them. They supply material for it to use and synthesise.

It may be observed, in conclusion, that the adoption of the historical method necessarily brings economics into closer relation to other departments of study than that which belongs to it when it is treated in a more statical way. The influence of political institutions, religion, education, moral principles, etc., cannot be overlooked in dealing with social evolution, even when special emphasis is laid on its industrial side. Economics thus comes to be regarded as a special department of sociology or social philosophy, rather than a strictly independent science. This need not, of course, prevent the recognition of the possibility of making a special study of the industrial side of life, or even of gaining valuable light by confining the attention for a time to that side of life, or to some special aspect of that side. Further, the historical method of study leads us to regard the growth of social life as having reference to an end. A process of development is naturally thought of as a development towards something. The consideration of the ideal form of social order thus comes into prominence, and in this

¹ Cp. Keynes, *Scope and Method of Political Econ.*, pp. 305-4, 1st ed. As an illustration of laws of the former kind, reference may be made to the generalisation of List, in his *Theorie des Nationalen Systems der politischen Oekonomie*, with reference to the stages of economic development through which the nations of the temperate zone pass.

way the study of economic science is brought very closely into relation to ethics.

[For further discussions in connection with this subject, see also ABSTRACT POL. ECC.; ANALYTICAL METHOD; A POSTERIORI REASONING; A PRIORI REASONING; DEDUCTIVE METHOD; POL. ECON. AND SCIENCE; INDUCTIVE METHOD. For a list of books and articles dealing with economic method, see the close of the article on DEDUCTIVE METHOD. The best general treatment of the subject is Keynes's *Scope and Method of Political Economy*, 1st edition. Chaps. iv. and ix. bear especially on the subject of the present article. Bonar's *Philosophy and Political Economy in some of their Historical Relations* will be found useful, though it deals very slightly with the influence of Comte and the development of the historical school. Special reference may also be made to Knies's *Die politische Oekonomie vom geschichtlichen Standpunkte*.—Menger's *Die Irrthümer des Historismus in der deutschen Nationalökonomie*.—Mill's *Logic*, bk. v. ch. x. "Of the Inverse Deductive or Historical Method."—Cliffe Leslie's *Essays in Political and Moral Philosophy*.—The article on "Political Economy" by Professor Ingram in the ninth edition of the *Encyclopædia Britannica*.—Professor Sidgwick's article on "The Historical Method" in *Mind*, old series, vol. xi. No. 2.—Suggestive remarks will also be found in Prof. Sorley's essay on "The Historical Method" (*Essays in Philosophical Criticism*, pp. 102-125)—in Mr. D. G. Ritchie's article "What are Economic Laws" (*Economic Review*, vol. ii. No. 3, pp. 359-377); and in several other recent articles and discussions.] J. S. M.

HISTORICAL SCHOOL OF ECONOMISTS.

This is the designation frequently given to a number of writers and teachers, whose work has been marked by certain common traits, and who have exercised an influence tending in general in the same direction. Their teaching, while in large part constructive, has yet been to an equally large extent critical of the methods and results of what is variously described as the "classical," "deductive," or "theoretic" school of economists (see CLASSICAL ECONOMICS; DEDUCTIVE METHOD). The "classical" school may be said to have remained up to the present dominant in England; it is strong in Austria and Italy; and it has included the names best known among the economists of the generation now passing away in France and America. Although, therefore, the historical school is now perhaps on the whole supreme in Germany, has representatives in all other important countries, including England, and is recognised as having done good service to economic science, the value of the movement as a whole cannot but be regarded as still *sub judice*. Moreover, even a colourless description of the movement as a whole would probably lead to misconception, owing to the marked divergencies between its representatives. The present article will, therefore, attempt only to trace the sequence and

affiliation of ideas; and the reader will refer to separate articles for a fuller account of the personages referred to.

Cliffe LESLIE raised the cry: "Back to Adam Smith." But it can hardly be doubted that Smith's frame of mind was on the whole essentially unhistorical, and that historical narration and inductive reasoning were with him subordinate to a deductive movement of thought. Malthus adduced a wealth of historical information in support of his doctrine of population. But the historical school can hardly be said to have made its appearance until the "orthodox" or "abstract" structure had been completed in England by Ricardo (1817), and there popularised by the Epigoni, and until the facile expositions of J. B. SAY (*Traité*, 1803, *Cours*, 1828) had diffused over the civilised world the principles on which the whole edifice of orthodox theory rested. The immediate literary creator of the historical school was Wilhelm ROSCHER, writing in 1842. Two writers, however, were, in different senses, forerunners of the movement,—Jones and List; and another, who was contemporary with its beginnings, but exercised no influence on it until a much later stage, was Auguste Comte.

In the midst of the growing success of the Ricardian group, Richard JONES (*Essay on the Distribution of Wealth*, 1831), protested that its conclusions, especially those concerning rent, applied only to a very recent period and a very small area. He urged with excellent sobriety the need for historical investigation; but his plea fell on deaf ears, and the only trace of his influence in economic literature for many years is to be found in J. S. Mill's treatment of peasant tenures. His German contemporary LIST (*National System of Pol. Econ.*, 1841), enormous as was his practical political influence in his own country, must as an economist be regarded as the prophet of a new movement rather than its initiator. His grouping of the economic history of the civilised nations of the temperate zone under five stages was a very rough and ready sketch, and, indeed, inaccurate; yet it threw into German thought the idea of historical evolution, the fruitful parent of more adequate formulæ.

Meanwhile A. COMTE (*Cours de Philosophie Positive*, 1839-42) was stating the same idea in more philosophical form. To him it seemed that economic phenomena were so intertwined with other social facts that a separate science of them was impossible. The all-inclusive science of society, SOCIOLOGY, he divided into social statics, dealing with facts of co-existence, and social dynamics, dealing with facts of sequence. For social statics the appropriate method was that of direct observation, for dynamics that of comparison,—which could only be effected by means of history. These ideas have of late penetrated into English economic circles through the writings of Dr.

Ingram; they are familiar to the German economists of to-day. But Comte's writings were altogether unknown to German economists forty years ago; and the historical school proper, in its earlier phases, was an entirely independent product of German thought.

The decisive word was spoken in the *Grundriss zu Vorlesungen über die Staatswirtschaft nach geschichtlicher Methode* issued by the then young Professor Wilhelm Roscher at Göttingen in 1843. He told his hearers that his teaching would be guided by the historical method, and that he "aimed at reaching for political economy a result somewhat similar to that reached in jurisprudence by the Savigny-Eichhorn method." Thus with Roscher the new inspiration was the direct result of the effect on contemporary German thought of the arguments of the historical school in jurisprudence. This school had argued that the legal institutions and ideas of a particular period and country were not to be regarded as eternal and necessary, but as the result of a long growth; and that earlier practices are not so much to be condemned from the modern standpoint as explained in their relation to envionring conditions. These ideas were readily transferable to the economic sphere. Hence the historical "method" was, from the first, more than a method with Roscher. It seemed to bring with it, as self-evident, the principle of relativity. This he explained in the well-known and oft-quoted *Preface*. The shape which, in his opinion, political economy ought to assume is indicated in his description of it as the doctrine (*Lehre*) of the laws of development (*Entwicklungsgesetze*) of the national economy (*Völkswirtschaft*). By the side of this phrase, and as equivalent to it, he placed in his later writings what he called the "fine definition" of Von Mangoldt,—"the philosophy of economic history."

Roscher has in recent years been criticised, by some approvingly by others disapprovingly, for his supposed failure to make any effort to reach his own ideal. It is true that his *Grundlagen*, the only volume of his great *System* that has been translated into English, is constructed very much on the old lines, and has been not inaptly described as Mill's *Principles* annotated with citations from the history of economic literature. But this is scientifically the least important of his works. In his *Essays* on particular subjects he was constantly under the influence of the thought of historical movement, though it found unsatisfactory expression in his use of such terms as "higher and lower stages of civilisation," "youth," "maturity," and "old age"; and he was curiously possessed by the thought that all civilised nations have to run through a like experience. It must be remembered, however, that in spite of his fondness for "*Entwicklung*," Roscher had received

his historical training in an old-fashioned, pre-evolutionary, school. His best work is to be seen in the volumes on *Ackerbau* (Agriculture, 1st ed. 1859; 12th ed. 1888), and *Handels- und Gewerbeleiß* (Trade and Industry, 1st ed. 1881; 6th ed. 1892), in his *System*. Here he traces the growth and varying shapes of concrete economic institutions,—the bony framework of society; and these two volumes, when compared with the space given to the same topics in the *Grundriss*, were clearly from the first intended to form the main body of his great treatise. They set an example now generally followed in German universities, but hitherto exercising little influence in other lands. The criticism to which Roscher's *System* is open—and, in their measure, such university courses of instruction also as follow in its footsteps,—is that the separation between the *Grundlagen* and the subsequent parts keeps matters asunder which need to be considered together. It is unsatisfactory, for instance, that the theory of wages and the history of trades unions should each be dealt with in isolation, and that they should be brought into no sort of vital relation with one another.

Soon after the appearance of Roscher's *Grundriss*, the movement to which it gave rise was reinforced by the advent of two other writers, who have since been justly regarded as joint-founders with Roscher of the historical school—Bruno HILDEBRAND, and Karl Knies. Hildebrand's *Nationalökonomie der Gegenwart und Zukunft* (1848) was never completed; and the first and only volume was chiefly critical. It is from this that the current German criticisms of Adam SMITH have been chiefly drawn. Hildebrand's ultimate object, as declared in his *Preface*, seems but an echo of Roscher; it is "to transform political economy into a doctrine (or teaching) of the laws of the economic development of nations." But he held to this conception much more firmly than Roscher did, and expressed it in far more attractive language. Perhaps the best statement of it is presented in the prefatory announcement with which he began the publication of his *Jahrbücher für Nationalökonomie und Statistik* in 1863: "The economy of nations is, like their language, literature, law, and art, a branch of their civilisation; like these other branches it moves within certain limits set by natural law; but within these limits it is a product of freedom and of the labour of the human spirit. Accordingly the science which deals with it is no abstract science, like the natural sciences stating the same law for all relations in time and space, and measuring everything by the same measure. On the contrary, it has for its object to investigate the movement of historical evolution, from stage to stage, alike in the case of individual peoples and in the case of mankind at large, and so to discover the link which the labour of

the present generation is to add to the chain of social development. The economic history of civilisation, and with it general political and legal history and statistics, are the only sure foundations whereupon may be erected any useful further construction of economic science. But history must not be the excuse for indifference, or divert men of science from the practical problem of the time. The understanding of the present is most vitally bound up with the understanding of the past; and he can have no right understanding of history to whom the conditions and needs of his own time are unknown."

Towards the end which he proposed Hildebrand's contribution was twofold. To him is due the distinction between *Natural-, Geld-, und Credit-wirthschaft* (incidentally in his book of 1848; elaborately worked out in his *Jahrbuch*, vol. ii. 1864), which has proved so useful a formula in subsequent historical writing; and the *Jahrbuch* founded by him was the first to furnish a medium for monographs by younger men on economic history.

Professor Knies is undoubtedly a scholar of far deeper philosophic insight than Roscher or Hildebrand. And his work *Die Politische Oekonomie vom Standpunkte der geschichtlichen Methode* (1853) was an elaborate and penetrating criticism of current ideas which even men like Roscher and Hildebrand had handled with scanty discrimination. Thus, as has been well said by Professor Schmoller, his book might almost be called "Prolegomena to a whole scientific epoch." "Whoever," remarks the same writer, "began his economic studies in the decade 1850-1860, knows how deep its influence has been, and how in certain respects it served as a confession of faith to the whole German school."

The thought on which Knies laid most stress was that of the development of economic opinion parallel with the development of economic conditions. The idea of the relativity of doctrine, already brought forward by Roscher, peculiarly interested him. And, although he encouraged historical study, and was ready to utilise its results, his book probably tended to turn some younger men from pursuing the path opened to them by Roscher and Hildebrand—the search for laws of economic evolution. On the other hand, he had no sympathy with the view which even Roscher had held that the classical doctrine, perhaps in some modified form, could be regarded as an "Allgemeiner Theil," or "Grundlagen," to be studied first. He urged that it rested on conceptions of property, contract, etc., which were themselves the result of history, and which were inextricably bound up with shifting conditions of time and place. That part of the theory which was composed of propositions of absolutely general validity, like the propositions of natural science, would be found to be small indeed.

Until about 1870 the waves of thought set flowing by these three writers, Roscher in Leipzig, Hildebrand in Jena, and Knies in Heidelberg, quietly spread over Germany, and took possession of the universities with but little opposition. With divergencies already indicated, the new movement had everywhere the characteristics of insisting—(1) on the relativity of economic theory, (2) on the desirability of the study of economic history—including therein the empirical and statistical observation of the present. Much detail work was done in these latter directions. Outside the country itself, the movement was unknown.

The foundation of the *Verein für Sozial-Politik* at the Eisenach Congress of economists and public men in 1872, gave the signal for an outburst of controversy. Hitherto the professional economists had not made themselves heard in practical politics: now they united in recognising the existence of a "social question," and in invoking the action of the state towards its solution. They thus incurred the enmity of a great many journalists and politicians; and as most of them were the disciples of Roscher, or Hildebrand, or Knies, the "historical school" became a synonym for the SOCIALISTS OF THE CHAIR. Even among economists themselves, the term was used to shelter all who were in any way dissatisfied with the classical economists and their German followers—to include the "inductive," the "realistic," and the "ethical" within its embrace. Roscher himself in 1874, in his *Geschichte der National-Oekonomie in Deutschland*, seemed to imply that the "realistic," the "historical," and the "ethical" directions were all much the same. But as soon as men of ability, thus for the time brought together in one camp, got beyond the utterance of generalities, divergencies were sure to make themselves felt. Professor Adolph Wagner of Berlin began about 1877, in the *Allgemeine oder Theoretische Volkswirtschaftslehre*, forming the first volume of a great *Lehrbuch*, the construction of a new edifice of economic theory to replace that of the PHYSIOCRATS and ADAM SMITH. Professor Gustav Schmoller of Strassburg (since of Berlin) maintained, on the contrary, that the time had not come for such an attempt, and that it should be preceded by a period of empirical, statistical, and historical inquiry. He established a series of *Staats- und sozialwissenschaftliche Forschungen*, wherein, under his guidance, his pupils have published a series of valuable investigations. It was perhaps hardly made sufficiently clear that the generalisations or "laws" at which such historical work was ultimately aiming were not so much laws of coexistence as laws of sequence; to use Comte's phrase, "dynamic" rather than "static." When the AUSTRIAN SCHOOL (*q.v.*) made itself heard, Professor Schmoller and those who agreed with him lamented—not so

much that a fresh resort should be made to abstraction and deduction, and that attention should be concentrated anew by some thinkers on the problem of value—but that this problem should be declared the main problem of economics, and those methods its most appropriate ones. On the other hand it became the practice of those who agreed either with Professor Wagner or Professor Menger to speak of Professor Schmoller as an example of "extreme *Historismus*." But it is not clear that Professor Schmoller and his disciples have gone beyond the positions assumed by the founders of the school. In his recent article on *Volkswirtschaft, Volkswirtschaftslehre und -methode* (Conrad's *Handwörterbuch*, 1894), Schmoller writes: "The more inquiry is limited to a particular state of economic affairs, and this is provisionally treated as stable—certainly an allowable methodological device,—the easier it is to grasp the dominant psychical and other causes, to derive therefrom typical forms of organisation, and to explain the elementary and typical economic processes. Whether these are called 'laws' or 'hypothetical truths,' they are, when used with due limitation, the great instruments of knowledge, and the bases of right economic policy." Schmoller goes on, indeed, to say that "they are not ultimate truths. It is necessary to carry through a deeper investigation of the changing causes, and the changing economic forms and processes. This investigation will be threefold—(1) into the shaping of the psychological causes, (2) into the history of economic organisation, (3) into the progress of humanity as a whole." For the first, Schmoller urges a psychological study which shall be wider than the somewhat antiquated balancing of pleasures and pains or utilities; as to the second, he remarks that the older historical economics pointed to the goal, and recent work in economic history has begun to collect and interpret the necessary material; and dangerous as the third may be, entering as it does into the fields of the philosophy of history, of teleology, of hopes and prophecies, such bold syntheses will always be necessary to guide us in practical action.

Meanwhile in England, as far back as 1866, Thorold ROGERS had set the example of thorough investigation into the economic life of the past in his *History of Agriculture and Prices in England* (vols. i. and ii., 1866). It was Cliffe LESLIE, however, who first introduced to English thought the ideas which had long been making their way in Germany. In his essay on *The Political Economy of Adam Smith* (1870), Cliffe Leslie criticised the conception then common in England that political economy was a body of necessary and universal truth; and in that *On the Philosophical Method of Political Economy* (1876), he argued that "the whole economy of every nation is the result of

a long evolution in which there has been both continuity and change, and of which the economical side is only a particular aspect or phase. And the laws of which it is the result must be sought in history and the general laws of society and social evolution." Cliffe LESLIE was thus the first to bring together and unite the teaching of KNIES and COMTE; this has been since done more thoroughly, and with a more complete acceptance of Comte's social philosophy by Dr. Ingram in his *History of Political Economy* (in *Ency. Brit.*, 1885; separately 1888). Cliffe Leslie's criticism has resulted in a more careful statement of their "postulates," by most English writers since,—as by Bagehot, in *Economic Studies*, 1879. But, as in Germany, so in England, there was urgent need that a beginning should be made in the detailed study and systematic teaching of economic history; in England it was from Dr. William Cunningham that the impulse was given in this direction, both by his writings (*Growth of English Industry and Commerce*, 1882; a new and much larger work under the same title, vol. i. 1890, vol. ii. 1892), and by his academic activity in Cambridge. A little later ARNOLD TOYNBEE directed the attention of students at Oxford to the "Industrial Revolution of the 18th century" (lectures published in 1884). And interest in the subject has since been stimulated from the historical and legal side by the works of Mr. Seebohm, (*English Village Communities*, 1883; *Tribal System*, 1895); Professor Maitland (*Select Pleas in Manorial Courts*, 1889); and Professor Vinogradoff (*Villainage in England*, 1892); from the statistical side by Mr. Charles Booth's *Labour and Life of the People* (1904); and from the evolutionary socialistic side by the writings of Mr. Sidney Webb (*History of Trade Unionism*, 1894), and others. It has begun to find a place in the requirements of Oxford and Cambridge examinations; in America, courses of lectures are regularly delivered upon it in most of the important universities and colleges, usually in connection with departments of economics, but sometimes in connection with departments of history; and in Harvard a professorial chair has been created with this object. Those who are engaged in this work differ, however, widely from one another in their attitude towards the current English theoretic teaching.

The position of the historical school in the three countries, Germany, England, and America, is affected very largely by academic organisation. In Germany there is a recognised distinction between the "Grundlegung" or "Allgemeiner Theil" and other departments of economics. The historical school are in practice to be distinguished from various theoretic schools—(1) by their insistence on the vital importance of a thorough study of economic history after the "Grundlegung";

(2) by the comparatively small compass into which they would compress the "Grundlegung"; (3) by the comparatively slight attention they would give to the psychology of "value" as a part of the "Grundlegung"; (4) by surrounding the individualist economics of self-interest there stated by general anthropological and historico-philosophical considerations. In England there is no such recognised distinction between the "Grundlegung" and other parts. Indeed, economic teaching in that country seldom includes more than the "Grundlegung." In America, following the example of Harvard, the tendency is to appoint teachers of economic history side by side with teachers of economic theory and finance; to make each "course" independent; and to leave each teacher to define his own relations to economic science as he pleases.

[There is no account of the historical school at all complete; and the student cannot dispense with reference to the actual writings of the leading authors mentioned above. Roscher's *Preface* of 1843 is translated in full in the *Quarterly Journal of Economics*, October 1894.—The best account, though sympathetic, is that of Dr. Ingram in *Hist. of Pol. Econ.*, ch. vi.—Professor Schmoller's essays on Roscher and Knies (*Zur Litteraturgeschichte der Staats und Sozialwissenschaften*, 1888), are brilliant and illuminating surveys of parts of the field.—For a somewhat more partisan presentation of some of the questions at issue than would be suitable here, reference may be made to Ashley, *Econ. Hist.*, i. Preface (1888), and an introductory lecture *On the study of Economic History* in the *Quarterly Journal of Economics*, January 1893.—For a different point of view, see Marshall, *Present Position of Economics* (1885), and Keynes, *Scope and Method of Pol. Econ.* (1904). See also Aug. COMTE; ENGLISH SCHOOL; FRENCH SCHOOL; GERMAN SCHOOL; HELD; CLIFFE LESLIE.] W. J. A.

HISTORY OF PRICES. See PRICES.

HITCHCOCK, ROBERT (16th century), of Caversfield, Bucks, served in the Netherlands under Charles V. in 1553.

His chief work, *A Politic Plot for the honour of the Prince* (Lond. 1st Jan. 1580, reprinted in Arber's *English Garner*), was one of the many schemes for the employment of the numerous idle but able-bodied vagrants who caused constant trouble in Elizabeth's reign. Hitchcock proposed that they should be employed as seamen in vessels to be fitted out for the herring and other fisheries, so that the profits which Holland enjoyed from this source might be secured to England. Hitchcock also wrote *The English Army Rations in the time of Queen Elizabeth* (appended to W. Garrard's *The Art of Warre*, 1591), which contains statistics of the victuals necessary for soldiers in garrisons. He quotes from his own experience of the time when he was in charge of 200 pioneers at Berwick in 1551.

[W. Cunningham, *Growth of English Industry and Commerce*, *Modern Times*, 1893.] R. H. H.

HOARDING. When practised by a community, or by large numbers of its members,

hoarding becomes an economic fact worthy of investigation. It may arise from commercial panic, from distrust of existing forms of investment, or from a want of any opportunity of investment. Or it may arise from misgovernment, and the consequent distrust of the holders of power.

In earlier times there was little or no industrial use for capital, except in agriculture or trade; and beyond the limited field of lending on mortgage, or at usury, to those who were oppressed by debt, there was no way of obtaining a return upon capital without entering into active trade. In England, almost up to the close of the 17th century, tradesmen or merchants retiring from business lived literally upon their savings. It is stated that the father of Pope, the poet, having amassed a fortune in trade in London, retired to the country about the time of the Revolution, carrying with him a strong box containing nearly £20,000, out of which he took from time to time whatever was required for household expenses. It was the opinion of writers about the same time, that very large sums were constantly kept hidden in secret places. Probably distrust was largely the cause of some of these cases; and from such or mixed motives these practices continued well into this century, until the growth of our system of banking, and the appreciation of its advantage and safety, together with the increase of joint-stock enterprises, has rendered hoarding no longer necessary. It still continues to be extensively practised in France, partly from the different condition of banking there, and partly from general distrust. The greater part of the war indemnity paid to Germany in 1871 was produced from the hoards of the French peasantry; and the same source supplied a large part of the gold required for the change of standard in Germany a few years later.

The most extensive system of hoarding of which there is any record is that which exists in India, and has been going on there for a very long period. This has undoubtedly arisen from the unscrupulous character of the former rulers of the country, and the habits induced by ages of misgovernment continue to influence the people in their present condition of security, and under their increased opportunities. Both gold and silver, in the form of bullion, of coin, and ornaments are hoarded by the natives of every class. Estimates as to the amount of wealth lying dormant in this way differ very widely, but the population is so numerous, and the habit so universal, that the amount must be very large. Enormous hoards are known to be in the possession of some of the native princes; and from the age of some of the coins contained among these treasures it is evident that the accumulation must have commenced hundreds of years ago.

Among the most civilised communities,

hoarding takes place at times of commercial panic. There is an almost universal distrust, and those who are able to obtain possession of coin or currency store it up, partly to enable them to meet their own impending obligations, and partly out of fear that later on they will not be able to obtain it. Direct evidence of this practice is not usually easy to obtain, but it is clearly indicated by the returns during the panic in London, in 1866. From the 21st March to the 30th May there was a steady decrease in the bullion at the Bank, amounting to £2,578,000 (see DRAIN OF BULLION). Yet at this time the country was gaining gold to much the same extent as usual, the net import during the three months April to June being more than 4 millions. During the same period the notes in circulation increased from 20½ millions to 26 millions, so that there must have been more than 12 millions, in notes and gold, withdrawn and hoarded.

The financial crisis in the United States in 1893 supplies another example, but no direct evidence of the fact is obtainable. The country had an ample supply of currency, not less than 100 millions of dollars (20 millions sterling) having been added thereto during the preceding three years, and their banking facilities were ample, yet there was for a while a perfect currency famine, and firms of the highest standing could scarcely obtain loans upon the most undoubted security.

[See report of Royal Commission on Gold and Silver, vol. i. 1887.—For hoarding in France and Germany: evidence of Mr. W. Fowler.—For hoarding in India: evidence of Sir D. Barbour.—For particulars of hoarding by Maharajah of Burdwan, see *ibid.* appendix v.—also letter in *Bankers Magazine*, London, 1893, vol. lvi. p. 205.—For currency crisis in U.S., see *Journal Inst. Bankers*, January 1894, vol. xv. pp. 37-42.—Blue book on Indian Currency, 1893.—J. M. Robertson, *The fallacy of Saving*.—Art. on SAVING.] R. W. B.

HOBBS, THOMAS (1588-1679), one of the most distinguished of English philosophers, was born at Malmesbury in Wiltshire, and died at Hardwick, a seat of the Earl of Devonshire. After attending a private school, he became a member of Magdalen Hall, Oxford, and took his B.A. degree in February 1608. Hobbes was recommended to the Earl of Devonshire as a tutor for his eldest son, and thus formed a connection with the great house of Cavendish which lasted to the end of his life, secured him from want, and gave him also the leisure necessary for meditation and study. Afraid that he had given offence by his writings on political philosophy, Hobbes left England at the time of the meeting of the Long Parliament in 1640, and spent eleven years in Paris. Here he made the acquaintance of the prince of Wales, afterwards Charles II. He returned to England in 1651, and from 1653 lived with the

Cavendish family. His writings were denounced by some as hostile to liberty and by others as hostile to religion. He was also involved in several scientific controversies; but he never experienced actual persecution. In the course of his long life, almost entirely devoted to study and to composition, Hobbes wrote many works on a variety of subjects, philosophical, theological, mathematical, physical, and literary. A collected edition of his Latin writings in five, and of his English writings in eleven volumes, was published between 1839 and 1845 by Sir William Molesworth. None of these writings can strictly be termed economical. Ch. xxii. of Hobbes's best-known treatise of political philosophy, *Leviathan* (published 1651), entitled "Of Systems subject, Political and Private," contains, however, some remarks upon the nature and influence of "bodies politic for ordering of trade," i.e. those privileged companies which in the 17th century carried on so much of the foreign trade of England. "The end of their incorporating is to make their gain the greater; which is done in two ways—by sole buying and sole selling, both at home and abroad." Both are gainful to the privileged body because thereby they buy at lower and sell at higher rates. "Of this double monopoly one part is disadvantageous to the people at home, the other to foreigners." But Hobbes thinks that it would be very profitable for a commonwealth if its merchants were bound up into one body to buy in foreign markets, whilst at liberty at home every man to buy and sell at what price he could. For in this way their mutual competition would act only to cheapen the commodities which they sell at home, not to enhance the price of the commodities which they buy abroad. The suggestion is ingenious, although impracticable. The economic doctrine of the *Leviathan* is chiefly contained in ch. xxiv., "Of the Nutrition and Procreation of a Commonwealth." This figurative title is thus explained by the author: "The nutrition of a commonwealth consisted in the plenty and distribution of materials conducing to life; in concoction or preparation; and when concocted, in the conveyance of it by convenient conduits to the public use." The materials of nutrition—animal, vegetable, and mineral substances—are the gift of God; but, as they are partly natural partly foreign, a commonwealth must import that which it lacks "either by exchange or by just war or by labour. For a man's labour also is a commodity exchangeable for benefit as well as any other thing; and there have been commonwealths that, having no more territory than hath served them for habitation, have, nevertheless, not only maintained but also increased their power, partly by the labour of trading from one place to another, and partly by selling the manufactures whereof the materials were brought in from other places."

The distribution of the materials of nourishment "is the constitution of mine and thine and his; that is to say in one word propriety (property)." Hobbes is at pains to show that this distribution is entirely the work of the sovereign. This doctrine follows from his general conception of sovereign power as in every sense absolute, and the creator of all social arrangements. But the progress of historical knowledge has rendered his proposition unmeaning. Whilst dealing with distribution, Hobbes makes some very sensible remarks on the impracticability of setting aside any fixed fund or estate to defray the public expenses. It is impossible to prevent sovereign power from falling into extravagant hands; and besides, "commonwealths can endure no diet," since their expense is not limited by their own will, but by "external accidents and the appetites of their neighbours."

By concoction Hobbes understands "the reducing of all commodities which are not presently consumed, but reserved for nourishment in time to come, to something of equal value, and withal so portable as not to hinder the motion of men from place to place; to the end a man may have in what place soever such nourishment as the place affordeth. And this is nothing else but gold and silver and money." The natural advantages of gold and silver for this purpose are then explained clearly but incompletely.

Lastly the procreation of a commonwealth is explained as the sending out of plantations or colonies. But nothing is said respecting the economic effects of colonisation.

It may be regretted that a writer of so much analytical power as Hobbes should have bestowed so little attention upon economics. But the explanation is to be found in the circumstances of his time and in the objects of his writings, so far as they deal with political science. The period at which Hobbes published the *Leviathan* was one of political confusion ending in civil war. The original cause of discord was not, as in our time, economic but religious. Men were contending, not for a greater share of the means of material well-being, but for freedom to worship as suited their conscience, and for power to force their mode of worship on those with whose conscience it did not agree. Hobbes endeavoured to extirpate the principle of strife by showing that every species of sovereign is and ought to be absolute, so that resistance to the will of the sovereign, whether prompted by religious zeal or any other motive, is always illogical, immoral, and destructive to society. The real importance of Hobbes's political treatises is to be found not in any occasional remarks upon economic subjects, but in his theory of sovereignty, which was developed by Bentham and the followers of Bentham, and through their writings has passed into current English thought

[Life of Hobbes in the *Dictionary of National Biography*, and the collected edition of Hobbes's *Works, English and Latin*, by Sir William Molesworth, in 16 vols., London, 1839-1845.—Bonar, *Philosophy and Pol. Econ.*, 1893.—Roscher, *Zur Geschichte der Englischen Volkswirtschaftslehre* (1851), pp. 47-53.] F. C. M.

HOCK, BARON KARL VON (1808-1869). Of Jewish descent, after having studied in the universities of Prague and Vienna, Von Hock entered the financial ministry of Austria and became director of the customs in Trieste and in Vienna. Later on (in 1867) the emperor made him a member of the upper house of the Austrian parliament. His first literary productions were novels, a book on *Descartes and his Opponents* (1835), and another on *Pope Sylvester II. and his Times* (1837), which has been translated into French. When director of the customs in Trieste, he wrote against List's system of national protection (*Der Handel Oesterreichs*, 1844); List, who recognised in him a worthy opponent, told him that with the increase of his practical knowledge of trade and industry he would come round to milder economic views, and Von Hock himself confessed in his *Oeffentliche Abgaben und Schulden* (Public Taxes and Debts), 1863, that he had indeed receded from his former unbending free-trading principles. This treatise is described by Professor Ad. Wagner as presenting "in its pregnant conciseness an almost perfect science of finance, and being by far the best on the technique of finance" (*Finanzwiss.* i. 52). Roscher considered that "it provides a fairly (*ziemlich*) complete science for highly cultivated states, although it reads more like the conversation of a highly-gifted and learned man than as a book intended for the use of teachers," but expressly praised Von Hock's "nice distinctions on the incidence and shifting of taxation" (*Gesch. der Nat. Oek. in Deutschland*, p. 1030). According to Professor Bastable, "it is specially good, as might have been expected from the production of a trained official, in its discussion of administrative points" (*Public Finance*, pp. 28-29, 3rd ed.)

Von Hock also published in 1857 *Die Finanzverwaltung Frankreich's* and in 1867 *Finanzen und Finanzgeschichte der Vereinigten Staaten von Amerika*. In the former, translated into French in 1859, the author has purely descriptive aims; although he expressly disclaims comparative criticism, he concludes his preface by holding up as a model the German system "with the simplicity of its organisation and the small number of its well-paid and independent officials." E. CA.

HODGSKIN, THOMAS (19th century), started, with J. Robertson, in 1823, the *Mechanics Magazine*, and, in 1824, became joint hon. sec. of the London Mechanics' Institute, the predecessor of the present Birkbeck Institute. In 1826 he delivered a course of four lectures on *Popular Political Economy*, published 1827, with numerous additions, mainly of a controversial character.

The main drift of the book is to justify the natural laws which regulate the production of wealth as opposed to the political and social institutions of men. For this purpose the statement of Adam Smith that labour was the *original* producer of all wealth becomes converted into the proposition that "there is no wealth which is not the produce of labour," which carries the inference that private ownership of land is unrighteous. Stress is laid, following J. B. Say, on the influence of knowledge in adding to productive power. Knowledge is developed by the increasing need of it. "Necessity is the mother of invention, and the continual existence of necessity can only be explained by the continual increase of people." Thus, incidentally, the principle of the increase of knowledge, together with that of the division of labour, serves to refute Malthus (see *MALTHUS*). Hodgskin writes in a highly dogmatic style, e.g.: "There is and can be no other rule for determining the relative value of commodities than the quantity of labour required to produce them." "Accumulation of capital, in the present state of society, checks production, and consequently checks the progress of population . . . and of national wealth." The book does not appear to have met with much success, as a promised continuation was never issued.

The importance of Hodgskin lies in the influence of his writings on Karl Marx. [S. and B. Webb, *The History of Trade Unionism*, London, 1894, 8vo, p. 147.—Menger, Anton, *Recht auf den vollen Arbeitsertrag*, 2nd ed., 1891, p. 52n.] In a letter to Lord Brougham, James Mill writes [Bain's *James Mill*, 1882, p. 363]: "The mad nonsense of our friend Hodgskin, which he has published as a system." In bibliography of *History of Trade Unionism*, an anon. tract, *Labour Defended against the Claims of Capital* . . . by a labourer, 1825, 12mo, is ascribed to Hodgskin [referred to by Böhm-Bawerk, *Capital and Interest*, p. 318, Eng. trans. 1890]; in Karl Marx's *Capital*, French ed., note on p. 335, another anon. work, *The Natural and Artificial Rights of Property* is further ascribed to him.

[Mention is made of Hodgskin in Goddard's *Life of Birkbeck*, London, 1884.] H. E. E.

HODGSON, JAMES, F.R.S. (1672-1755), mathematician, and an intimate friend of Flamsteed; author of *The Valuation of Annuities upon Lives deduced from the London Bills of Mortality* (Lond., 1747), besides some mathematical and astronomical works. R. H. H.

HODGSON, WILLIAM BALLANTYNE (1815-1880), was born in Edinburgh, where he was educated at the High School, and entered the university at the age of fourteen. After leaving college he devoted himself to lecturing on education, literature, and phrenology, and also to journalism. He was much influenced by George Combe's *Constitution of Man*, which, altogether apart from the phrenology, he considered a most valuable work. In 1839 he

was appointed secretary to the Mechanics Institute, Liverpool, in which he had to control a large number of lectures, and in acknowledgment of his success he was appointed principal. In 1858 he was appointed one of the assistant commissioners to the Newcastle Commission on primary education. In 1870 the Merchant Company of Edinburgh were empowered to use part of their trust funds for the foundation of a chair of political economy in the university of Edinburgh, and Dr. Hodgson was appointed first professor in 1871. The appointment was for seven years only with a right of re-election. The limited tenure—annulled since (1892)—being different from that of all the other Scottish chairs, was such an annoyance that it was with great difficulty he was persuaded to accept re-election in 1878. He held the chair till his death. During his tenure he settled at the beautiful residential estate of Bonaly Tower, near Edinburgh, and here he accumulated a large library, his collection of economic works being presented on his death to the university of Edinburgh. He was twice married, and left by his second wife two sons and two daughters (the elder married to his successor Prof. J. Shield Nicholson).

Dr. Hodgson had a very wide circle of friends and acquaintances, and was a voluminous correspondent with many of the most eminent men of the time in education, literature, politics, and economics. Owing to the demands made upon his time by these and other social requirements, he unfortunately left no work worthy of his reputation. At the time of his death he was engaged on an English dictionary, and part of the materials were used as the basis of a popular work on *Errors in the Use of English* (Edinburgh, 1882), whilst another part of the materials has been incorporated in Dr. Murray's dictionary, now coming out. He wrote in an extremely lucid, attractive, and yet it may be said classical style, and he was an admirable speaker, and one of the best-known conversationalists of the day. In fact, it was by his personal influence mainly that his reputation was established as one of the foremost men in education and economics; and his literary remains give a very inadequate idea of his vast learning and of his remarkable powers of popularising difficult subjects. He may be described as an orthodox economist, but alike in matter and style to be ranked rather with Adam Smith than Ricardo. He was too widely read in many departments of literature and science to be affected by the narrowness of the traditional ultra-Ricardian school. His contributions to economic literature are reprints of lectures on *Competition* (1870).—*The True Scope of Economic Science* (1870).—*Importance of the Study of Economic Science as a Branch of Education for all Classes* (Royal Institution of Great Britain, 1854, third edition revised, Edinburgh, 1870).—*Economics of the Drink Manufacture* (1874).—*Inaugural Addresses at Edinburgh University* (1871 and 1878).—*Co-operative Congress* (1877).—*The Instruction of the Community, especially the Wage-Earning Classes, in*

Economic Science (Social Science Congress, 1877). He also translated CAVOUR's (*q.v.*) work on Ireland.

[J. M. D. Meiklejohn, *Life and Letters of W. B. Hodgson, LL.D. of Edinburgh*, 1883.—E. Woodhead, *Student Recollections of Professor Hodgson, Edinburgh*, 1883.—Prof. Nicholson, *Introductory Address at Edinburgh University*, 1881.]

J. S. N.

HOECK, JOHANN DANIEL ALBRECHT (1763-1839), was, during the year 1796, professor of philosophy and cameralistic science at Erlangen.

Previously he had been attached to the civil service, which he re-entered at the expiration of this single year of professorship, and became first a Prussian director of police with the rank of councillor of justice (*Justizrath*) and afterwards a councillor of government (*Regierungsrath*) in the Bavarian service.

Hoeck's works, *Grundlinien der Cameralpraxis* (1819), and *Materialien zur Finanzstatistik der deutschen Bundesstaaten* (1823), are distinguished by an extensive and practical knowledge of his subject, but are deficient in higher scientific qualities.

[*Allgemeine Deutsche Biographie.*]

E. Ca.

HOFACKER, JOHANN DANIEL (1788-1828), doctor and professor at Tübingen. Besides medical publications, he was author of *Ueber die Eigenschaften, welche sich bei Menschen und Thieren von den Eltern auf die Nachkommen vererben, mit besonderer Rücksicht auf die Pferdezucht* (Tübingen, 1828), in which he maintained that in unions where the father is older than the mother, more males than females are born, and *vice versa*.

[Conrad, *Handwörterbuch der Staatswissenschaften*, s.v., Jena, 1889, etc.]

R. H. H.

HOFFMANN, JOHANN GOTTFRIED (1765-1847), statesman, statistician, and economist, was born at Breslau. He studied at Halle and afterwards at Leipzig. In 1798 he was a teacher in the Collegium Fredericianum at Königsberg. He was entrusted with several public employments through the influence of the President von Auerswald, and showed in all a high order of ability. Hence he was appointed in 1807 to the professorship of practical philosophy and cameral science at Königsberg, and in the following year was made councillor of state. He was made professor of political economy in the university of Berlin at its foundation in 1810. He directed the Prussian bureau of official statistics, which Stein had founded, from 1810 to 1844. He won the confidence of Hardenberg and became his principal adviser. He was at the headquarters of the allies in 1813, and was present at the conclusion of the peace of Paris and at the congress of Vienna, and accompanied Hardenberg on several of his diplomatic missions. After the peace, he held office in the ministry of foreign affairs, and resumed his duties at the university and the statistical board, which had for some time been necessarily suspended. In 1834 he

resigned his professorship owing to failure of sight. He spent his last years in collecting and re-editing his numerous scattered essays and treatises.

J. K. I.

The Prussian statistical bureau was completely remodelled in 1810, and Hoffmann, who may perhaps be considered as the founder of Prussian official statistics, was the first director under the new system. To him is due the radical change in the publication of the statistics of that country, which under his direction were issued as the well-known *Statistische Tabellen*, an official annual publication comprising very miscellaneous statistics. These tables in time became somewhat less comprehensive than at first. Most of Hoffmann's unofficial books were written late in life, after he had retired from office. Some are based on official figures collected by his department, and deal mainly with various aspects of population. His more individual and more strictly economic work is directed chiefly to questions of the freedom of labour and to finance. Generally speaking, his writings show approval of Prussian institutions, as then existing. He was the first who seriously advocated the adoption of the gold standard in Germany.

His most important works are:—*Das Interesse des Menschen und Bürgers bei den bestehenden Zunftverfassungen*, 1808.—*Die Lehre vom Gelde, [als Anleitung zu gründlichen Urtheilen über das Steuerwesen, mit besonderer Beziehung auf den Preussischen Staat]*, 1838.—*Die Bevölkerung des Preussischen Staates*, 1839.—*Die Lehre von den Steuern [als Anleitung zu gründlichen Urtheilen über das Geldwesen, mit besonderer Beziehung auf den Preussischen Staat]*, 1840.—*Die Befugnis zum Gewerbebetriebe [zur Berechtigung der Urtheile über Gewerbefreiheit und Gewerbezwang: mit besonderer Rücksicht auf den Preussischen Staat]*, 1841.—*Die Zeichen der Zeit im Deutschen Münzwesen [als Zugabe zu der Lehre vom Gelde und mit besonderer Rücksicht auf den Preussischen Staat]*, 1841.—*Das Verhältniss der Staatsgewalt zu den Vorstellungen ihrer Untergebenen*, 1842.—*Sammlung kleiner Schriften staatswirtschaftlichen Inhalts*, 1843.

[R. Böckh, *Die geschichtliche Entwicklung der amtlichen Statistik des preussischen Staats*, Berlin, 1863.—W. Roscher, *Geschichte der National Oekonomie in Deutschland*, München, 1874.]

R. H. H.

HOGENDORP, GYSBERT KAREL VAN (1762-1834), was born at Rotterdam. He first adopted a military career, afterwards studied law under Pestel at Leyden, graduated, and published at the same time an essay, *De aequali descriptione subsidiorum inter gentes federatas*. He was appointed "pensionary" of Rotterdam during the revolutionary period (1795-1813), but he declined all public office and betook himself to trade as a member of the house Gysbert Karel van Hogendorp and Co. In 1813 he stood at the head of the movement

against Napoleon, and was a member of the provisional general government. After the return of the House of Orange he was invested with several high offices, but as he could not agree with the king's system of government he resigned them all, retaining only his seat in the second chamber of the states-general (the Dutch House of Commons), where he was almost the sole opposition member. In 1825 he returned to private life, and died 1834.

Hogendorp was in the first place a statesman, in the second an economist,—this is clearly shown by his works; he never gave a general statement of his principles, which therefore must be gathered from his writings on practical subjects.

In these he principally deals with the questions of taxation, national debts, free-trade, pauperism, and colonies. As to the general principles of taxation he shows himself in many respects a disciple of Adam Smith, like his contemporary GOGEL (*q.v.*); from the latter, however, he widely differed, at least in his later period, by his views on the income-tax. In his *Lettres* he proposed such a tax on the basis of a classification of incomes. He approved of free-trade as conducing to national wealth. Government therefore should promote trade and industry only indirectly by good instruction, exhibitions, good roads, canals, etc. Yet he was not opposed to premiums on export, and low duties on the import of articles taxed at home. He did not regard pauperism as a necessary evil, and disagreed with Malthus's views on population. He early advocated the system of agricultural colonies. His ideas on colonial policy are very remarkable. The best means to promote the development of colonies, he thinks, is to keep political government entirely separate from trading, to let the inhabitants, natives as well as Europeans, obtain property in land, and to prohibit all monopolies.

[His principal economical works are these:—*Gedachten over 's Lands financiën, voorgedragen in Aanmerkingen op het Rapport tot een stelsel van algemeene belastingen, uitgebragt 9 Juli 1800* (Thought on the Finances of the Country, being Comments on a Report on a System of General Taxation, dated 9th July 1800), Amsterdam, Wed. Doll., 1802.—*Verhandelingen over den Oost-Indischen handel* (Treatise on the East Indian Commerce), *Id.* 1802-3.—*Brieven aan een Participant in de O. I. Compagnie* (Letters to a Shareholder in the East Indian Company), *Id.* 1802-3.—*Missive over het Armenwezen* (Letter on Pauperism), *Id.* 1805.—*Bijdragen tot de huishouding van Staat in het Koninkrijk der Nederlanden, verzameld ten dienste der Staten-Generaal* (Essays on the Economic Administration of the Kingdom of Holland, addressed to the States-General), the Hague, 1818-1825. A second edition, edited by the well-known statesman Thorbecke, was published at Zalt-Bommel in 1854.—*Lettres sur la prospérité pub-*

lique, adressées à un Belge dans les années 1828-1830. Amsterdam, Diederich frères. A Dutch translation, 1832.] A. F. V. L.

HOLDER OF A BILL OF EXCHANGE.

The Bills of Exchange Act, 1882, defines a holder of a bill of exchange or promissory note as the "payee and indorsee who is in possession of it or the bearer"; and further defines a "holder in due course" as a holder "who has taken a bill complete and regular on the face of it under the following conditions: namely (a) that he became the holder of it before it was overdue, and without notice that it had previously been dishonoured, if such was the fact; (b) that he took the bill in good faith and for value, and that at the time the bill was negotiated to him he had no notice of any defect in the title of the person who negotiated it" (§ 29). A holder may sue in his own name, and if he is a "holder in due course," a defect of title in any of the prior parties does not affect his right, nor can any right of set-off or counterclaim available against any other party to the bill be exercised against him. If a holder, whose title is defective, obtains payment of the bill the person who pays him in due course is validly discharged (see § 38). If, for instance, a person steals a bill endorsed in blank, and obtains value for it from another person, who has no notice of any irregularity, the purchaser is entitled to payment, being "the holder in due course"; also if the thief obtains payment from the acceptor, the latter not having had any notice of the theft, he gets a valid discharge, having paid it to the "holder." It should, however, be pointed out that a person holding a bill, the chain of indorsements on which is interrupted by a forged indorsement, according to English law is not a "holder" in any sense, and is not entitled to payment though he gave value for the bill; also that a payment to a person holding such a bill is not a valid discharge—the only exception being payment in good faith by a banker of a bill payable on demand. English law, in this respect, materially differs from the law of other countries. According to German, Austrian, and Italian law a person, otherwise in the position of a holder in due course, is entitled to sue the acceptor and genuine indorsers though one of the indorsements through which he derives his title is not genuine (German Bill of exchange code, §§ 36, 76, see decision of supreme mercantile court reported *Reichsoberhandelsgericht*, vol. ii. p. 281; Italian *Codice di Commercio*, §§ 287, 327). French law confers no rights on the holder of such a bill, but declares the drawee discharged if he has paid the holder without having had notice of the loss of the bill (*Code de Commerce*, §§ 144, 149). As, according to § 72 of the English Act, the validity of an indorsement depends upon the law of the place where it was made, the provisions of foreign law referred to above may

frequently become applicable in the case of bills of exchange payable in England, and materially affect the rights of the holders of such bills. E. S.

HOLDINGS OF LAND (FLUCTUATIONS IN SIZE AND THEIR ECONOMIC EFFECTS).

During the greater part of our history England has been a country of small agricultural holdings, though of large estates. In all probability there was little change in the distribution of land among the cultivators from Anglo-Saxon times until the 15th century, and it was not until the 18th century was well advanced that large holdings, except for sheep-farming, became common. Seebohm (*English Village Community*, p. 141) gives evidence to show that peasants before the conquest held land in parcels of the same size as those held by their successors under the Normans; a virgate or 30 acres (exclusive of pasture, wood, and waste) may be taken to have been the average, perhaps the normal, holding of the higher class of serf—the *villanus*, while the lower sort, the *bordarius* or *cotarius*, commonly held about 5 acres. Round thinks that pasture was allotted in the proportion of a little more than 3 statute roods to an acre of arable (*Domesday Studies*, 1888, vol. i.). The lord's demesne too, which may generally have comprised from a quarter or a third to a half of the manor (Brodrick, *English Lands and English Landlords*, 1881, p. 8, and Ashley, *Economic Hist.*, i. pt. 2, p. 267) was often let off to free tenants, whose holdings were considerably larger than those of the serfs. Sir H. Ellis's classification (*Introduction to Domesday*, vol. ii. p. 511) gives

Unfree Holders or Serfs.	Free Tenants.
82,609 <i>bordarii</i>	10,097 <i>liberi homines</i>
1,749 <i>cosceti</i>	2,041 "
5,054 <i>cotarii</i>	commendati
108,407 <i>villani</i>	23,072 <i>sochemanni</i>
369 <i>radmanni</i>	
749 <i>bovarii</i>	

If it is remembered that about a quarter of the arable land in the country was probably kept in the lords' hands, and that Northumberland, Cumberland, Westmoreland, Durham, and Lancashire, besides Monmouthshire and Wales, were not included in the survey of 1086, a rough idea may be formed of the proportion of the cultivated land of the country held by the different classes of cultivators. In Middlesex alone was any attempt made by the Domesday commissioners to record the size of the holdings as well as the number of holders; elsewhere the villeins were taken, not individually, but by classes.

Little change probably took place in this system before the Black Death of 1349, or even, according to Professor Ashley, before 1450 (*Econ. Hist.*, vol. i. pt. 2, p. 264); and it is very difficult to trace the progress or

estimate the amount of such change as there was. The destruction of something like half the people by the Black Death, the frequent wars, the attractions of growing towns and of an extended trade, must all have helped to thin the rural population; but the central fact is the rapid increase of sheep-farming to meet a growing demand for English wool, and to avoid the expense of arable cultivation when labour was scanty and dear. From this time it is necessary to consider pasture and arable land separately, and the problem becomes more difficult. There is no doubt that the frequent enclosures of the end of the 15th and the first half of the 16th centuries affected both arable and pasture land, and that one result of the agrarian change was to consolidate some small holdings into larger ones; but many of the lands enclosed for sheep-farming were the demesne lands in the hands of the landlords. The legislative attempts to guide or check the change give some indication of its extent; e.g. an act of 4 Hen. VII. forbade farmhouses with 20 acres of arable to be pulled down; an Act of 24 Hen. VIII. ordered the keeping up of all farms from 30 to 50 acres, and an Act of the next year limited sheep-farmers to 2000 sheep, which would mean a legal maximum farm of about 500 acres. (The extent of the enclosures between 1470 and 1600 is roughly estimated with a map in Ashley's *Econ. Hist.*, i. pt. 2). There is abundant contemporary evidence that great numbers of the small farms disappeared, but there is no means of calculating how many remained; or in what proportion the land was divided among landlords cultivating their own demesne, freeholders, leaseholders, and copyholders; or what was the acreage held, collectively or individually, by any of these classes. Nor can the total population during this period be exactly stated. It is reckoned that it amounted to 2,000,000 at the time of the Domesday Survey; in 1377, twenty-eight years after the Black Death had destroyed one-third or perhaps one half of the people, 1,405,602 persons over fourteen years of age paid the poll-tax; in 1574-75 the roll of fighting men numbered 1,172,674.

With the 17th century our information becomes rather more definite, but is founded only upon contemporary estimates, not till the 19th century upon statistics.

Gregory King, writing in 1696 (*Natural and Political Observations and Conclusions*), estimates the numbers of the landed classes as follows:—

160 temporal lords	12,000 gentlemen
26 spiritual "	10,000 clergymen
800 baronets	40,000 freeholders
600 knights	140,000 "
3000 esquires	150,000 farmers

The whole country population he puts at 4,100,000, the town population at 1,400,000. In the former class leaseholders and copyholders are possibly reckoned together, the freeholders being separately counted, perhaps because they possessed the parliamentary franchise—certainly not because of any superiority in the size of their holdings, for the forty-shilling freeholder need not have possessed much land after the cheapening of silver from the discovery of American mines. As enclosures and other agrarian changes probably took place but slowly during the latter part of the 16th century and throughout the 17th, King's estimate may be taken to hold roughly good for the reign of Elizabeth. But it is not wholly trustworthy; the number

of freeholders is generally considered too high (Gneist, *Eng. Const.*, vol. ii. p. 323; Toynbee, *Industrial Revolution*), and 150,000 can hardly account for all the non-freeholders who held land. For the copyholders had been numerous on every manor throughout the four centuries following Domesday, and cannot have decreased so fast as King's numbers would imply; and the tenant farmers had been a growing class since most lords of the manor gave up cultivating their demesne in the 14th and 15th centuries.

The annexed table shows the difference between the estimates made by Gregory King and those of Arthur Young about a hundred years later. Unfortunately the first applies to England and Wales, the second to England only.

Authority.	Date.	Population.	Acreage under cultivation.	Holdings.	
Gregory King	End of 17th century	5,500,000 ¹	{ Arable 11,000,000 Pasture 10,000,000 }	70 Acres and under, 290,000	Over 70 Acres, 4,000
Arthur Young	End of 18th century	8,675,000	{ Arable 16,000,000 ² Pasture 16,000,000 }	Farmers, exclusive of those employing no labour, 2,800,000	

During the 18th century the process which converted England from a land of small to a land mainly of large holdings was carried on more quickly. The rise of a moneyed class desiring the political influence which was the monopoly of landowners created a demand for land, and at the same time supplied the capital without which enclosures and the other expensive agricultural improvements of the day could not be carried out. This was the second period of active enclosing, not now, as in the 16th century, mainly for sheep-farming, but for the conversion of the scattered arable strips in the mediæval common fields into separate farms enclosed with hedge or fence. Between 1710 and 1760 334,974 acres were enclosed (Toynbee, 1887, p. 38), and 7,350,577 more were enclosed between 1760 and 1849 (Porter, *Progress of the Nation*, 1851, p. 157). Much of this was of course waste land never before cultivated. Various opinions have been held as to the time and the speed at which the small freeholders disappeared; some causes for their disappearance are at any rate clear. Dr. Cunningham (*Industry and Commerce*, ii. 478) says "that the pressure of poor-rates was the determining cause which rendered the yeomanry willing to sell, while the high prices of the last year of the [French Revolution] war gave them the opportunity of selling advantageously." It is certain too that the decay of domestic industries after the great mechanical inventions of last century took from the less prosperous of the small farmers their only means of eking out a scanty living. Yet Arthur Young's language often implies the disappearance of many of

these small freeholders before his day, and Arbuthnot, writing in 1778, regrets "the loss of that set of men who were called yeomen," though, while protesting, with Dr. Price, against great estates, he cordially approves of large farms (*Inquiry into the Connection between the Present Price of Provisions and the Size of Farms*). It is, however, important to notice that Arbuthnot, in defending large farmers against complaints of their comparative unproductiveness, takes 100 and 300 acres as typical instances of small and large farms respectively. It was in Norfolk, Essex, and on the Wiltshire Downs that Arthur Young, when on his tours, found the largest farms. Of 250 farms described by him in the North the average size was 284½ acres.

The 19th century has intensified the changes of the 18th. In 1833 small proprietors were selling even in Kent; speculation in land during the high war prices had led very generally to borrowing, and, when the unforeseen fall of prices came, to the ruin of many small landowners and the transfer of their land to more wealthy proprietors (*Report of Select Committee on Agriculture*, 1833, pp. x. 195). The first return of the number and size of agricultural holdings was obtained in 1880; for the "*New Domesday Book*"—the *Return of Landowners* of 1873—made no attempt to distinguish between estates and farms. The census, however, of 1851 (see *Encyclopædia Britannica*, 8th edition, art. "England"), carries our statistical information on the point farther back, but it is probably less exhaustive than later returns, particularly for small holdings.

¹ According to Finlaison's calculation for 1700, 5,134,516.

² Couling, in 1827, estimated that 25,632,000 acres were cultivated in England about 1801, and 3,117,000 in Wales.

The following table shows the statistics of recent years; it applies throughout to England and Wales. The size of 2558 farms was not stated in 1851.

It is clear that England is not even now wholly cultivated by large farmers, and that small holdings have of late shown a tendency to increase again. But some at any rate of the causes which produced large farming are still active, and some laws and legal customs combine with social and economic conditions (see CULTURE, LARGE AND SMALL; CONVERSION OF ARABLE INTO PASTURE; FARMING;) to make anything like peasant farming difficult in England. The

expenses of conveyancing add appreciably to the sum required for purchase, especially in the case of small parcels of land (see Torrens, *Transfer of Land by Registration*, Cobden Club Essays, p. 38, and Kay, *Free Trade in Land*; but for another view, Jevons, *Fortnightly Review*, Mar. 1881). The development of "small culture," such as market-gardening, may be balanced against these adverse conditions, and allotment legislation (see ALLOTMENT) is a sign of reaction against the accumulation of the land in few hands.

The economic effects of the fluctuations in the size of agricultural holdings cannot easily

Date.	Population.	Acreage under cultivation.	Number of occupiers.	100 acres and under.		100 to 300.	300 to 1000.	Over 1000.	Average size of holdings.
1851	17,922,768		225,318	142,358		64,153	15,987	771	Eng. and Wales } 111
1867	(1861) 20,066,224	Arable 13,523,000 Pasture 11,017,000 (round numbers)	390,660						Eng. 68 Wales 47.8
1875	(1871) 22,712,266	Arable 14,603,856 Pasture 12,202,596	470,000	(50 and under) 333,630	(50 to 100) 54,498	63,766	15,633	473	Eng. 57 Wales 47
1880	(1881) 23,974,439	Arable 14,096,176 Pasture 13,267,606	473,638	336,149	54,369	66,373	16,241	506	Eng. 59.2 Wales 47
1885	"	Arable 13,577,235 Pasture 14,122,478	475,140	($\frac{1}{2}$ acre to 5) 136,423	(5 to 100) 255,083	67,024	16,035	573	Eng. 59.9 Wales 46.8
1890	(1891) 29,001,018	Arable 13,079,889 Pasture 14,792,439	494,835	(50 and under) 409,422	(5 to 100) 54,937				Eng. and Wales } 56.3
1904	(1901) 32,626,075	Arable 11,761,090 Pasture 15,977,882	432,327	(1 to 5) 91,485	(5 to 50) 198,514	(50 to 300) 126,956	(over 300) 15,342		Eng. 66.2 Wales 46.4

be isolated from the results produced by other factors than mere size; and there has been no time when contemporary opinion was not divided upon the point. But the best writers have generally agreed as to the value of enclosures, which, from the 16th century at any rate, may be considered as *implying* the amalgamation of small holdings. Fitz-Herbert (*Surveying*) said in 1523 that if an acre of meadow "lie in severalty it is worth half as much again" as if "it lie at large in the common meadows." Tusser in 1557 strongly approved of enclosing not only pasture but arable:

"Good land that is several, crops may have three,
In champion country it may not so be."

i.e. one-third of the champion land must lie fallow (*Five Hundred Points of Good Husbandry*, Somers Tracts, 1810, ch. 17). Blith, in 1649, alluding to enclosed pasture, speaks of the "disproportion betwixt the profits of one lordship in common, and the next adjoining to it inclosed. The one worth three hundred pounds in common, the other neere a thousand in pasture" (*The English Farmer*, p. 35). Fortrey in 1663 made the same calculation of comparative values. In the 18th century Arbuthnot in 1773 defended large farms against

the charge of comparative unproductiveness by arguing that farmers of only 100 acres could not afford to keep the proper number of labourers and of horses, and that an arable farm of 300 acres employed more men than three 100-acre farms. Adam Smith believed that "after small proprietors, rich and great farmers are in all countries the greatest improvers." (*Wealth of Nations*, ed. McCulloch, p. 76). Arthur Young, while alluding to contemporary complaints against large farms as depopulating and as raising prices, emphasised their connection with the expensive enclosures of his day: "How, in the name of common sense," he asked, "were such improvements to be wrought by little or even moderate farmers! Can such enclose wastes at a vast expense—cover them with an hundred loads an acre of marle? . . . No. It is to GREAT FARMERS you owe these" (*Political Arithmetic*, p. 155). Writers of this century are still divided, but perhaps the balance of expert opinion at the present time inclines, for England, to large farms with a moderate sprinkling of very small ones, not for corn or sheep, but for dairying, fruit-growing, and market-gardening.

[For the economic side of the question at the

present day see CULTURE, LARGE AND SMALL; FARMING.—Kebbel, *Agricultural Labourer*, 1893, where the views of various writers are summed up.—Craigie, "Size and Distribution of Agricultural Holdings," in *Journal of Statistical Soc.*, Mar. 1887.—Bear, "State-made Farmers," *Nineteenth Cent.*, April 1891.—Caird, "Agricultural Statistics," *Journal of Stat. Soc.*, Mar. 1869.—Leadam, *Agriculture and the Land Laws*, 1881.—Brodrick, *English Land and English Landlords*, 1881.—Prof. Ashley has paid much attention to enclosures in his *Econ. Hist.*, vol. i. pt. 2.—See also Boutmy, *Constitution d'Angleterre*.—For manorial agriculture Denton's *England in the 15th Century* may be referred to. For the 18th century see Arthur Young's *Tours*, especially *Six Months Tour through the North of England*, vol. iv. pp. 192, 198-267.—F. Forbes, *Improvement of Waste Lands and Dissertation on Great and Small Farms*, 1778. For peasant farming in the Channel Islands, Arnold's *Free Land*, 1880.—Abstracts of many of the Agricultural Statistics are to be found in the *Journal of the Statistical Society*.] E. G. P.

HOLIDAYS. The term holiday now signifies little more than a day on which no work is done. But the etymology points to the fact that particular days have been reserved from the performance of labour, usually from a religious motive. All religions have set apart certain days for the performance of religious duties. These duties, whether external as in the case of sacrifice, or internal as in the case of prayer and meditation, have always been deemed to require the undivided attention of those who wish to discharge them, and attention cannot be concentrated upon any act without an interval of leisure longer than is needed for its bare performance. The mind must be disconnected, as it were, from ordinary occupation before it can be devoted entirely to religious duties. The feeling of compassion, too, which may be traced in all the religions of civilised men, has tended to multiply occasions of rest and of enjoyment. In all the more primitive religions the rites necessary to express piety and conciliate the higher powers have been so many and complex that the holidays required for worship have also sufficed for rest. Such was the case with the nobler forms of polytheism, as in ancient Greece or Italy. Such also is or was the case with the Latin and Greek churches. Under these circumstances the demand for holidays merely as opportunities of rest does not occur. But in communities professing a simpler form of Christianity, or little influenced by religious feeling, the proportion of time set apart for religious observances is shorter. Strict Protestants have absolutely condemned all secular occupations on Sunday, but, with the reservation of Sundays, have left the whole year for labour. Hence a demand for holidays not of a religious character has been made by modern philanthropists and has been partially conceded, as in this country by Sir John

Lubbock's Act creating four bank holidays in each year.

Considered merely on economic grounds, the necessity of a certain number of holidays in every year cannot be denied. It is proved by an overwhelming induction that incessant labour does not yield the largest net product. As productive labour cannot be continued for the whole twenty-four hours, so neither can it be continued for all days in the year. Moreover all reasonable economists will allow that welfare as well as wealth is desirable, and that even the greatest possible production of wealth in a given time would be too dearly bought by degeneration. But no absolute rule can be laid down as to the number of days in the year which should be reserved from industry. In different cases different periods of leisure are determined by difference (1) in national temperament; (2) in the character of occupations; (3) in the use generally made of holidays. Thus as regards (1) national temperament, certain races evolve an exceptional amount of energy in a given time, and so require longer periods for the restoration of vital force, whilst others evolve energy more slowly but more continuously, and so require more time to produce the same result. A comparison of the Englishman with the Hindu or Chinaman would probably illustrate this difference. (2) Difference in the character of occupations. Tending the machinery of a modern cotton mill is a more exhausting occupation than guiding a plough, and the occupation of the poet or the discoverer is more exhausting than the care of machinery. Purely intellectual occupations in the case of those who follow them assiduously are carried on more or less involuntarily. Much of the highest and most fruitful thinking may be described as unconscious cerebration. The born lawyer is for ever thinking over cases, the born inventor over mechanical improvements. This kind of labour is therefore not only intense but also difficult for the labourer to arrest. Even prolonged leisure may not give him repose unless accompanied by change of climate, scenery, or society. On the other hand the ploughman's labour ends when the plough stops, the bricklayer's when he has laid the last brick of the day. Thus it may be affirmed that the more intellectual the labour, the longer should be the intervals of rest. (3) The difference in the use generally made of holidays,—a holiday may be spent in a great variety of ways, each with a different economic result. It may be spent (a) in mere debauchery, in which case the cost of the holiday is great and the result of the holiday is diminished power of production; or (b) in wholesome pleasure; or (c) in mere vacancy, which, except for the overworked, is comparatively unprofitable; or (d) in religious and domestic quiet, as in the English Sunday at its best, with

the result of strengthening and concentrating character. The renewal of energy, the consolidation of character, are all of direct economic value; and the holiday which contributes in due proportion to all is the best holiday in an economic sense.

It is therefore clear that no rational economist will lay down any absolute rule as to the number of days in each year on which productive labour should be intermitted. He will only say that every class of producer should have as many holidays in the year as are necessary to the highest efficiency, which implies (1) that the faculties are fresh and vigorous, (2) that the habit of industry has not been enfeebled by too many or too long intervals of idleness. These conflicting considerations can be balanced only after an independent experimental inquiry for every calling.

[*Blue Book on Sunday Rest in Various Foreign Countries*. See remarks of Petty and Cantillon on the economic advantages of Protestantism as wasting fewer days in holidays than Roman Catholicism.] F. C. M.

HOLLAND, JOHN (*d.* 1722), the organiser and perhaps the founder of the Bank of Scotland, was a merchant of the STAPLE (Munk, *Roll of Roy. Coll. Phys.*, ii. 92), and connected with the East India Company. This may be gathered from his own words, for he says in reply to a statement that the East India Company's cashiers' notes passed currently in payment for the company's use that he "never saw or knew of such notes, although I was about eight years almost every day conversant in that Business, and for several years since, have had opportunity to know the Affairs and Methods of that Company" (*Discourse*, introduction). Elsewhere he mentions that he was sworn to the English East India Company (*ib.* 13). In 1693 he and several Scotch merchants in London obtained for seven years an exclusive right to manufacture in Scotland "Colchester Baises, and all other sort of Baises, which Baises will consume a great deall of wooll which cannot be otherways profitable" (Acts of Parl. of Scotland, ix. 313). Soon afterwards he and four others made various proposals to William III. for starting a bank and for supplying the government with money, but they came to nothing (*Ruine of the Bank of England*, 4, 5). In 1695, being requested by a Scotch friend to draft a scheme for a bank for Scotland, he with some hesitation did this, and his views were incorporated in the act "for erecting a publick Bank," passed July 1695, which authorised the creation of a bank possessing exclusive banking rights in Scotland for twenty-one years (Acts Parl. of Scotland, ix. 494). This institution differed in kind from any existing banks, for it was the "first instance in the world of a private joint-stock bank, formed by private persons, for the express purpose of making a trade of banking, dependent

on their own private capital and wholly unconnected with the State" ("Banking in Scotland" in Macleod's *Dict. Pol. Econ.*, 124). And to Holland the credit of originating the idea as well as of drafting a workable scheme is in all probability due. Burton (*Hist. Scotland*, viii. 67) regards him as the organiser rather than as the founder of the bank, but gives no definite reason for his opinion. Holland and four of his associates in the baise manufactory—it would be interesting to know whether they were the four above mentioned—were among those empowered to receive the subscriptions, which were quickly taken up. In 1696 he was chosen as the first governor of the bank which he was invited to organise, being at his "own charge and expense," with the prospect of $\frac{1}{10}$ of any profits which might remain after the payment of 12 per cent interest to the subscribers (*Discourse*, 5). He was a gainer by the bargain, and speaks warmly of the justice and generosity which prevented him from losing by his work (*Ruine*, 6). He had to face great difficulties at the outset, for the Scotch knew nothing about banking, and only after some opposition did Holland succeed in obtaining the sanction of the directors to his suggested rules. He was exceedingly anxious that the rate of interest should be kept low, and that every facility should be given to borrowers, but his proposal that the statutable rate (6 per cent) should be reduced to 4 per cent met with much opposition. The African Company, in defiance of the privileges of the bank and with the object of ruining it, almost immediately set up the trade of banking as one of its many departments of work; but the discretion displayed by Holland and the directors enabled them to tide over the crisis until the collapse of the company left the bank without a rival. Holland, writing in 1715, states that though he had left off business for about twenty years, he could yet spend a good part of his time in doing the business of a bank, and that though living a perfect country life, he spent some time in contriving schemes which might be for the public good (*Ruine*, 6). And from his letters it would seem that his advice was sought in emergencies by the directors of the Bank of Scotland. In 1715 he brought forward a proposal for starting a company which should lend "money on land and for the relief of the poor of the kingdom" (*Directors of the Bank of England*, 6). The rate of interest was not to exceed 4 per cent, and as the possible lowering of the bank rate which might result might be an objection to those interested in the bank, Holland wrote various pamphlets and letters indicating the advantages of a low rate to the nation, and pointing out the ruin which, he considered, must overtake the Bank of England unless it modified its policy. A scheme and rules for the management of a bank in Ireland were also drafted by him and his son

Richard. He died at Brewood Hall, his residence in Staffordshire.

John Holland is known to have written the following pamphlets:—*A Short Discourse on the present temper of the Nation with respect to the Indian and African Company, and of the Bank of Scotland.* Also of *Mr. Paterson's pretended Fund of Credit* (1696).—*The Ruine of the Bank of England and all Publick-Credit inevitable, and the necessity, in a short time, of stopping the payments upon the several Funds to the Bank, South Sea Company, Lotteries, etc., if the Honourable House of Commons will not themselves be Judges of the means that may be offer'd to prevent it* (1715).—*The Directors of the Bank of England Enemies to the Great Interests of the Kingdom, and also not just to the trust reposed in them by the Adventurers, who chose them to do their best Endeavours, by all honest Means, for the Advantage of the Joint Stock* (1715).—*Some Letters relating to the Bank of Scotland* were published with explanatory remarks in a letter to the Proprietors, by his son Richard Holland in 1723.

[In addition to Holland's own writings, the following may be consulted: Chambers, R., *Domestic Annals of Scotland*, iii. (1861).—Munk, W., *Roll of the Royal College of Physicians*, iii. (1878).—Lawson, W. J., *History of Banking* (1850).—Macleod, H. D., *Dictionary of Pol. Economy* (1863).—Burton, J. H., *Hist. of Scotland*, viii.—*Historical Account of the Establishment, etc., of the Bank of Scotland* (1728).] E. A. M.

HOLOGRAPH. A term applied to a "deed" or writ written, wholly or in the essential parts, with the granter's own hand. A holograph document, such as a will in the testator's own handwriting, is held in Scots law as well as in French law, and the systems of law derived from French law, to be valid without witnesses. A document may be proved by extrinsic evidence to be a holograph one; and if it is stated in the body of it to have been written by the granter, the presumption of law is that it is so. But a holograph writing, other than a will or a mercantile document written in the course of trade, does not of itself prove its own date where the date is in dispute or of importance; this may be proved by other means. A. D.

HOME INDUSTRIES. This is the older form of industrial occupation, which was gradually, and not without much irritation, superseded by the **FACTORY SYSTEM**. In contradistinction to the latter, it may be accurately and simply described in the following words, which are taken from the report of the committee of the House of Commons on the woollen manufacture of England, 1806. "In the domestic system, . . . the manufacture is conducted by a multitude of master manufacturers, generally possessing a very small, and scarcely ever any great extent of capital. They buy the wool of the dealer; and, in their own homes, assisted by their wives and children, and from two or three to six or seven journeymen, they dye it, when dyeing

is necessary, and through all the different stages work it up into undressed cloth."

Up to the time when the factory system began to be practised, all the industries may be said to have been of this nature. The prevailing feature of the system is the existence of the small capitalist, who provides work and livelihood only for himself and a meagre supply of subordinates. This system produced the crafts and **GILDS** (see also **CORPORATIONS OF ARTS AND TRADES**) of the middle ages; and the questions of capital and labour to which it gave rise are exemplified in the famous statute of apprentices in our own country (see **APPRENTICESHIP, STATUTE OF**). It was undermined when the great inventions of last century, and the extension of the principle of division of labour, gave rise to the great organisations of workmen and the concentration of labour power. The savings effected by the large capitalist forced the small capitalists to compete in the only way open to them, viz. by combining their capital and forming one large unit in place of many small ones. Hence the progress of **JOINT-STOCK COMPANIES**, and the legislation of the present century for facilitating the formation of these. Notwithstanding this process of elimination, there are many scattered survivals of the older system, especially in the textile industries. As an economic system, that of the handicrafts is historically very interesting; from a social standpoint it contrasts in many ways so favourably with the factory system that many are inclined to regret its decadence and virtual annihilation in England.

[Rogers's *Six Centuries of Work and Wages*.—Ashley's *Economic History*.—Yeats's *Technical History of Commerce*.—Cunningham's *Growth of English Industry and Commerce*.—H. M. Hyndman's *Historical Basis of Socialism*. In Latimer's *Sermons* some interesting facts regarding English home industries in the middle ages may be found. J. L. Green, *The Rural Industries of England*, 1895.—Ad. Smith, "Of Shetland Stockings," *W. of N.*, bk. i. ch. x.] M. G. D.

HOMESTEAD AND EXEMPTION LAWS OF THE UNITED STATES. *Definition*.—Homestead is the house and land constituting a family residence. In law it is such residence exempt from forced sale.

Provision for the exemption of homesteads from levy for the payment of debts was not made in the common law, but is entirely statutory, being made on grounds of public policy only, because it is not well for the state that a family be deprived of its home: it should be protected against alienation of the home, especially through the improvidence or misfortune of the head of the family. Not only is such legislation modern, but it is even of recent date. The first law on the subject found in America was approved 26th January 1839, in Texas, at that time an independent republic.

At present, out of the forty-four states, four territories, and the district of Columbia, sixteen of the states have constitutional provisions for the exemption of homesteads, and all of them, with the exception of Delaware, Rhode Island, and the district of Columbia, provide for such exemption by statute. All of them exempt a certain amount of personal property, including primarily wearing apparel, furniture, tools, library, cattle, etc. Naturally the details of the laws vary much in the different states. Always the legal possessor of a homestead right must be the head of a family. Usually the owner of the homestead must be living on the property in question,—although in the state of Texas and in some few others the homestead right may be obtained as soon as the property is improved, so that the intent of acquiring a residence thereon is clear. In some states the homestead right is assumed from the fact of the head of a family occupying the property with his family. In other states the property so claimed for exemption must be openly declared at the time the property is made the homestead; and in still others there must be a recorded claim to the homestead in order to give it the right to exemption. The nature of the claim is that of an estate for life, although the wife and children of the owner have also an estate of inheritance, the children's rights lasting until they become of age. In some states, in order to give a clear title to the property if it is sold or mortgaged, the wife must freely sign the deed or the mortgage; and in some cases mention must be specifically made of the fact that by so doing she gives up her homestead rights. This provision has at times been used for fraudulent purposes, the wife signing the mortgage, but not specifically mentioning the homestead. Time and court decisions will, however, remedy such defects. The exemption of the homestead from sale on account of debts is not a complete one. In no case is the homestead claim good as against the state itself on a claim for taxes. Generally the right does not extend to exemption for payment of a debt made to purchase the property itself, nor against a mechanic's lien upon the property, nor to debts already existing when the estate was bought. The amount of the exemption varies greatly in the different states. In Maryland the value of the estate which is exempt, whether real or personal property, is limited to \$100 (£20); whereas in Texas, California, North Dakota, South Dakota, and in some of the other states the value of the property exempted may amount to \$5000 (£1000). In some of the states the amount of personal property that is exempt from levy is fixed; but the homestead may be a certain lot of ground,—for example, in Minnesota 80 acres or less in the country, or one lot to one half-acre in city or town; and in

Kansas 160 acres in country, or 1 acre with improvements in town, regardless of its value. Under this law, if the homestead occupied but one lot of ground in a city, it might be almost palatial in nature and of great value, and still be exempt from levy. In Wisconsin and Iowa equal liberality is shown. In some of the newer states great hardship has often resulted from the fact that creditors could not collect from well-to-do debtors sums due to them, because they had been invested in a homestead. The rule of construction of the homestead and exemption statutes varies in the different states. For example, in Louisiana and Minnesota the construction is strict, the courts holding to the letter of the law; whereas in many of the other states—as, for example, in Michigan—the courts have decided that the construction of the law, on a number of grounds of public policy, should be liberal, and in favour of the owner of the homestead rather than of the creditor.

In the statutes of the federal government the expression Homestead Laws applies to the laws of congress which have provided for the free settlement of the public lands. Under the law of 20th May 1862, "every person who is the head of a family, or who has arrived at the age of twenty-one years, and is a citizen of the United States, or who has filed his declaration of intention to become such, as required by the naturalisation laws, shall be entitled to enter one quarter-section (160 acres) or a less quantity of (certain) unappropriated public lands," and file a homestead claim upon the lands. If he lives upon these lands and makes due improvements for five years, he may receive a clear title to the lands from the United States upon the payment of a small registration fee of 5 or 10 dollars (£1 or £2). If, after he has resided upon the land for three years, he can show that one acre out of every sixteen has been planted with trees, cultivated for not less than two years, and set not over twelve feet apart each way, he may at that time get a patent to his land without waiting for the expiration of the full period of five years. At any time before the expiration of the five years provided by law he may receive his patent upon the payment of the \$1.25 (5s.) or the \$2.50 (10s.) per acre provided under the regular pre-emption law. It is also provided in this homestead law that no such homestead shall become liable to the satisfaction of any debt contracted prior to the issue of the patent therefor. Under this homestead and pre-emption law nearly all of the free public domain of the United States has been already taken by actual settlers, to the great benefit of the country. To this law has been due, in great part, the immigration of the best of the foreign element now in the United States, as well as the enormous increase in the value of the western lands, and

the rapid advance in wealth and culture of the western states.

[The leading authorities on Homestead and Exemption laws in the United States are: Rufus Waples, *The Law of Homestead and Exemption*, 1893; Seymour D. Thompson, *On Homesteads and Exemptions*, 1878; and J. H. Smyth, *Homesteads and Exemptions*, 1875.—A very careful and complete discussion of the subject is found also in Washburn, *On Real Property*, 1887.—Of course the final authority must always be the statutes of

the individual states and the legal decisions thereupon.]

The following table contains a very brief digest of the exemptions of real property and personal property in all of the states and territories of the United States, excepting Alaska. The table is modelled after the one prepared for Lalor's *Cyclopedia of Political Science, Political Economy, and of the Political History of the United States*, published in 1883; but it has been entirely revised and brought down to date, 1st January 1895.

J. W. J.

STATES.	REAL PROPERTY EXEMPTION.	PERSONAL PROPERTY EXEMPTION.
Alabama	Homestead worth \$2000 (£400) 160 acres in country, or one lot in city.	\$1000 (£200) of personal property, wearing apparel and other articles.
Arkansas	Homestead to head of family of value of \$2500 (£500) 160 acres in country or 1 acre in city, or at least 80 acres in country or one-fourth acre in city regardless of value.	To amount of \$200 (£40) and clothing, if unmarried, or \$500 (£100) and clothing to heads of families.
California	Homestead worth \$5000 (£1000) to head of family, or \$1000 (£200) to any person.	\$200 (£40) worth of furniture and a multitude of special articles, and life insurance moneys where the annual premium did not exceed \$500 (£100).
Colorado	Homestead not over \$2000 (£400) in value.	Furniture \$100 (£20) stock in trade to amount of \$200 (£40) and various articles.
Connecticut	Homestead worth \$1000 (£200).	Library, etc., \$500 (£100); cattle, etc., \$300 (£60) and wearing apparel to any person; to head of family;—many specific articles; horse, etc.; \$200 (£40) to physician; \$200 (£40) boat, etc.
Delaware	No real estate exemption.	\$75 (£15) tools, etc.; and books to any person; to head of family \$200 (£40) worth of personal property additional; in Kent Co. \$50 (£10) worth of tools to any person, and \$150 (£30) worth of personal property to head of family; sewing machine.
Florida	160 acres of land in country, or $\frac{1}{2}$ acre and residence in town.	To amount of \$1000 (£200).
Georgia	Real estate or personalty to the value of \$1600 (£320).	Real estate or personalty to the value of \$1600 (£320).
Idaho	Homestead worth \$5000 (£1000) to head of family, or \$1000 (£200) to any person.	Desks, etc., \$200 (£40); cabin of miner, etc., \$500 (£100); life insurance moneys where premium did not exceed \$250 (£50); library, etc., of physician, attorney, etc.; many other articles.
Illinois	Residence worth \$1000 (£200) to a householder with family.	To any person \$100 (£20) personal property; to head of family, \$300 (£60) worth; to all wearing apparel, etc.
Indiana	To each householder \$600 (£120), real or personal, or both.	Property real or personal to the amount of \$600 (£120).
Iowa	Homestead to head of family of 40 acres in country or $\frac{1}{2}$ acre in city or town, of the value of at least \$500 (£100).	Presses, etc. of newspaper, \$1200 (£240); household furniture, wearing apparel and many other articles; life insurance money to a beneficiary to amount of \$5000 (£1000).
Kansas	160 acres in country, or 1 acre with improvements in town; value not limited.	\$500 (£100) furniture; tools, etc. \$400 (£80); stock, food, etc. \$300 (£60); and other articles to head of family; to other person—tools, etc. \$400 (£80) and other articles; pension money for three months.
Kentucky	Land with dwelling to value of \$1000 (£200) to a householder.	\$100 (£20) furniture, clothing and domestic animals.
Louisiana	Homestead and personal property limited to \$2000 (£400).	Homestead and personal property limited to \$2000 (£400).

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STATES.	REAL PROPERTY EXEMPTION.	PERSONAL PROPERTY EXEMPTION.
Maine	Land and dwelling, value \$500 (£100), to a householder.	\$50 (£10) furniture, \$150 (£30) library, \$300 (£60) farm animals, clothing, tools, etc.
Maryland	Real or personal property of value of \$100 (£20).	Wearing apparel, books, and many other articles.
Massachusetts	Homestead to value of \$800 (£160) to householder having family.	\$300 (£60) furniture; tools, etc. \$100 (£20); stock, etc. \$100 (£20); boat for fishing, \$100 (£20); \$100 (£20) sewing machine; and many other articles.
Michigan	40 acres in country, or city lot and residence to value of \$1500 (£300).	\$250 (£50) furniture, \$250 (£50) stock in trade, \$150 (£30) books, farm animals and minor articles; where judgment is for work, labour or services, not professional, only \$500 (£100) worth of personal property is exempt.
Minnesota	Homestead to householder with family, 80 acres in country, or one lot to $\frac{1}{2}$ acre in city or town.	\$500 (£100) furniture, etc.; animals, etc.; \$300 (£60) tools, etc.; \$400 (£80) presses, etc. of newspaper; \$2000 (£400) and \$400 (£80) worth of stock in trade; and many other articles.
Mississippi	Homestead to householder with family, 160 acres in country, or residence, etc. in city of value of \$2000 (£400).	\$250 (£50) personal property or specific articles; library, \$250 (£50); instruments, etc., \$250 (£50), life insurance moneys \$10,000 (£2000) to beneficiaries or \$5000 (£1000) to executor or administrator for benefit of heirs or next of kin.
Missouri	160 acres, worth \$1500 (£300) in country, or buildings in city to value of \$1500 (£300) to \$3000 (£600).	Furniture \$100 (£20), provisions \$100 (£20), domestic animals \$150 (£30); or in lieu of all specified, \$300 (£60) net exemptions.
Montana	Homestead to householder of 160 acres or $\frac{1}{2}$ acre in city or town, of value of \$2500 (£500).	Farming tools, etc., \$600 (£120); \$100 (£20) books, etc.; cabin of miner with appliances \$500 (£100); articles specified.
Nebraska	Homestead not exceeding \$2000 (£400) in value.	\$500 (£100) exempted when no real estate is owned, and pension money or property purchased or improved with it to value of \$2000 (£400).
Nevada	Homestead to head of family to value of \$5000 (£1000) in gold coin.	Chairs, etc., \$100 (£20); cabin of miner \$500 (£100), and \$500 (£100) tools, etc., \$100 (£20) sewing machine; library, instruments, etc.; many other articles.
New Hampshire	Homestead worth \$500 (£100), or so much thereof as does not exceed \$500 (£100).	\$100 (£20) furniture, \$200 (£40) in library, \$100 (£20) in tools, \$50 (£10) in fuel and provisions, clothing, domestic animals.
New Jersey	Homestead to amount of \$1000 (£200) to householder.	To amount of \$200 (£40) and clothing.
New York	Homestead to value of \$1000 (£200) to householders.	\$250 (£50) in furniture, mechanics' tools, instruments, library, etc.
North Carolina	Homestead to value of \$1000 (£200) to occupant of an estate.	To value of \$500 (£100).
North Dakota	Homestead of value of \$5000 (£1000) to head of family.	\$100 (£20) books, etc.; wearing apparel; and \$1500 (£300) worth of personal property additional.
Ohio	To amount of \$1000 (£200) to heads of families only. If homestead sold under prior lien, \$500 (£100) paid to widow or heirs.	Clothing, furniture, tools, etc., or \$500 (£100) additional exemption if no real estate is owned.
Oregon	Homestead of 160 acres in country or one block in city or town, of value of \$1500 (£300), or at least 20 acres in country or one lot in city or town regardless of value.	\$300 (£60) in furniture, \$100 (£20) clothing, or \$50 (£10) for each member of family, \$400 (£80) tools, etc.; farm animals.
Pennsylvania	Property, either real or personal, to the value of \$300 (£60).	\$300 (£60) value of property, either real or personal, besides wearing apparel; where the judgment is for wages of \$100 (£20) or less, or board for four weeks or less, no exemption is allowed.

HOMESTEAD AND EXEMPTION LAWS OF THE UNITED STATES 329

STATES.	REAL PROPERTY EXEMPTION.	PERSONAL PROPERTY EXEMPTION.
Rhode Island	No real estate exemption.	\$200 (£40) tools, etc.; \$300 (£60) furniture, etc.; books, etc., \$300 (£60); many other articles.
South Carolina	Homestead worth \$1000 (£200).	\$500 (£100) worth of personal property.
South Dakota	Homestead to head of family of 160 acres in country or house and lots in city or 1 acre in city or town, of value of \$5000 (£1000).	Books, wearing apparel, etc., to any person; to head of family \$750 (£150) additional; to any person \$300 (£60) additional; or in lieu thereof:—Books, etc., \$200 (£40); \$200 (£40) furniture; cattle, waggons, stock, etc., \$1250 (£250); library, etc., \$300 (£60).
Tennessee	Homestead worth \$1000 (£200).	Clothing, furniture, and a long catalogue of miscellaneous articles.
Texas	200 acres with house in country, or lot worth \$5000 (£1000), and residence in town, to a family.	Furniture, tools, and many other articles.
Vermont	Homestead worth \$500 (£100) to any house-keeper.	Clothing, furniture, farm animals, and sundry stores, \$250 (£50) in teams, \$200 (£40) professional library, and tool chest of mechanic.
Virginia	\$2000 (£400) in real or personal property to head of a family.	Clothing, furniture, library, domestic animals, besides \$2000 (£400) real or personal.
Washington	Homestead to householder of value of \$1000 (£200).	Wearing apparel; \$500 (£100) private library; to householder; \$500 (£100) furniture, etc.; cattle, etc., or \$200 (£40) personal property; \$500 (£100) farming utensils; \$500 (£100) tools; \$200 (£40) instruments of physician and \$500 (£100) library; library of attorney or other professional man \$1000 (£200) and \$200 (£40) of furniture.
West Virginia	Homestead worth \$1000 (£200) to head of a family.	Personal estate not exceeding \$200 (£40) in value.
Wisconsin	40 acres with house in country, or house and $\frac{1}{4}$ acre in town.	\$200 (£40) furniture, etc.; \$200 (£40) farming utensils; \$200 (£40) tools; \$1500 (£300) presses, etc. of printer, or where judgment is for wages for services to defendant \$400 (£80), many other articles.
Wyoming	Homestead to head of family of value of \$1500 (£300).	\$150 (£30) wearing apparel; to head of family:—\$500 (£100) furniture; and other articles; \$300 (£60) tools, etc.; \$300 (£60) library, instruments, etc.
TERRITORIES. Arizona	Homestead to head of family of value of \$4000 (£800).	Personal property to family of value of \$1000 (£200) and other articles.
District of Columbia	No real estate exemption.	Clothing, furniture, etc. to value of \$300 (£60); merchants' stock or mechanics' stock or mechanics' tools \$200 (£40); family library \$400 (£80); and other articles.
New Mexico	Homestead to head of family of value of \$1000 (£200).	Wearing apparel, cattle, etc., books, etc., \$200 (£40) furniture, and many other articles; to unmarried woman:—\$150 (£30) wearing apparel and other articles; instruments, etc., \$150 (£30); library of attorney, \$500 (£100); many other articles; to head of family not an owner of homestead \$500 (£100) real and personal property additional.
Oklahoma	Homestead to head of family of 160 acres and improvements; or 1 acre in city or town; or real or personal property of value of \$600 (£120).	Wearing apparel, furniture, and many other articles.
Utah	Homestead to head of family of value of \$1000 (£200), \$500 (£100) additional for wife, and \$250 (£50) additional for each member of family.	\$200 (£40) chairs, etc.; \$300 (£60) furniture, etc.; \$300 (£60) farming utensils; \$500 (£100) tools, etc.; instruments, etc.; \$500 (£100) cabin of miner and \$200 (£40), tools, etc.; many other articles.

HOMOLOGATION (Fr.). Term employed for the formality by which an authority confirms certain acts or conventions between individuals or associations. It is most frequently used in relation to railway tariffs, general or special, which cannot be applied without the homologation in France of the minister of public works. The necessity for it was at first contested by the companies, which argued their absolute right to raise or reduce their rates within the limits fixed by their charters or acts of concession. The government maintained its prerogative of examining the proposed tariffs and imposing its veto by a refusal to homologate, as a measure of public policy, otherwise the established economic system of the country might be frustrated by differential rates in favour of foreign imports, particular merchandise, traders, or localities. The contention of the government prevailed, and all modifications of tariffs are now submitted to the department of public works for homologation.

T. L.

HONOUR (liberty or franchise), a collection of manors, retaining their separate manorial organisation in most respects, even when one central court was held for all. These estates were developments of grants, made by Anglo-Saxon kings, of jurisdiction, with or without land, over large districts, even whole hundreds. None but lords of honours held courts over a district larger than a manor, and even such courts were really aggregations of manor-courts. As local jurisdiction and feudal organisation decayed the great lords might have succeeded in dividing the country among a few large landed proprietors but for the legal checks put upon their jurisdiction (Assize of Clarendon, 9, 11, Stat. of Marlborough), and upon the formation of new manors (Quia Emptores, 1290). Doubtless the caution of the kings helped to keep up the numbers, as well as to keep down the power, of the landed nobility and gentry.

[Stubbs, *Const. Hist.*, 1880, I. 106, 400.—Gneist, *Hist. of Eng. Const.*, trans. 1886, p. 148, and ch. xi.—*Magna Carta*, 43.—Digby, *Real Property*, 1876, 52.]

E. G. F.

HONOUR (PAYMENT FOR). Where a bill of exchange has been noted or protested for non-payment, any person may intervene and pay it *supra* protest for the honour of any party liable thereon, or for the honour of the person for whose account the bill is drawn. Payment for honour is known in continental countries as payment by "intervention," a term which expresses its nature as a "negotiorum gestio." It thus constitutes an exception to the general rule of English law that payment by a stranger to the contract is ineffectual to liberate the debtor. Where a bill is paid *supra* protest the person who pays it is thereby subrogated to the rights and duties of the holder as regards the party for whose honour he pays, and all parties liable to that party.

[See § 68 of the Bills of Exchange Act, 1882; and Chalmers, *Bills of Exchange*, ed. 4, p. 230.]

M. D. C.

HOOKE, ANDREW (18th century), compared the capital wealth of the country with the amount of the national debt in order to show that the existence of the latter involved no danger to the state. He estimated the growth of capital between 1600 and 1750 by assuming the value of the personal stock to be twenty times as large as the amount of coin in circulation; to this he added the value of lands and houses; and thus arrived at a total of a thousand million pounds, or twelve and a half times the amount of the national debt in 1750. Such estimates must always be based on conjecture rather than on knowledge; and that made by Hooke was distinctly too high. Hooke also suggested a scheme for the discharge of the national debt.

An Essay on the National Debt and National Capital, or the Account truly stated, Debtor and Creditor, London, 1750.

[M. V. D. M. [Monsieur Vivant de Mézagues], *A General View of England from the Year 1600 to 1762 in a Letter to A. M. L. C. D.* Translated from the French, London, 1766.—Sir R. Giffen, in *The Growth of Capital*, London, 1889, p. 90, speaks highly of this publication, which supplies the means for a criticism of that of A. Hooke.]

R. H. H.

HORN, IGNACE EINHORN, also known as Edward Horn (1825-1875), was born at Vag-Ujhely (Hungary) and died at Pesth. Having taken a part in the insurrection of 1849, he was compelled to leave his country and went to Germany, where he published *Hungary before 1848* (in German) in 1851. The publication of this work brought on him a political prosecution. The severe sentence which followed compelled him to take refuge in Belgium, where he published, also in German, his *Statistisches Gemälde des Königreichs Belgien*, 1853, and *Bevölkerungswissenschaftliche Studien aus Belgien*, 1854. In 1855 he established himself at Paris, where he was soon employed as a contributor on the *Journal des Économistes* and on the *Revue Contemporaine* as well as on the *Journal des Débats* and *La Presse*, and also published *Das Kreditwesen in Frankreich*, 1857, *John Law ein finanzgeschichtliche Versuch*, 1858, then *La crise cotonnière et les textiles indigènes* (8vo, 1863) as well as the speech made on his reception into the Institute of Egypt at Alexandria, *Du progrès économique en Égypte*, 1864. In 1866 he published *La Liberté des Banques*. In this work Horn argued against monopoly in banking matters. Horn's essay on Boisguillebert, for which he obtained a prize from the Institute, was published the next year under the title of *L'économie politique avant les physiocrates*, 8vo (these four in French). He also undertook a publication of the greatest value, the *Annuaire international du crédit public*. This was established by Horn with the assistance of other well-known writers in France and elsewhere, but

unfortunately it was only continued for the three years 1859, 1860, and 1861.

Horn took an important part during the year 1868 in the economic discussions going on in the public meetings permitted at that time. After this, Horn, who had been naturalised in France, unexpectedly returned to his native country, in which he was appointed to a post of much distinction. It should be added that he was greatly liked by all who knew him; that all his public occupations never made him a rich man; and that in the different countries where he took up his temporary abode he was much esteemed. This was particularly the case in France.

A. C. F.

HORNE, ANDREW (d. 1328), an eminent lawyer, legal writer, and chamberlain of London, left two valuable compilations on law and procedure.

Liber Horne (preserved in the Guildhall of London).—*La Somme appelle Mirroir des Justices vel Speculum Justiciariorum*, to which Horne made many important additions, first pub. London, 1642.

[Sir E. Coke, *Prefaces to 9th and 10th Reports*, trans. by G. Wilson, London, 1777.—G. Crabb, *A History of English Law*, London, 1829.]

R. H. H.

HORNECK (also written HORNICK and HERNINGK), PHILIPP WILHELM VON (about 1638-1713), a German economist, was born at Mainz. He came at an early age to Vienna with his father, who had been a physician in the Rhineland, and who, having become a convert to Catholicism, was ennobled and made an Austrian imperial councillor. The younger Horneck, about 1690, became private secretary of the prince bishop of Passau, who made him a privy councillor in 1695. His wife was a daughter of J. J. BECHER, and he seems to have derived some of his opinions from that economist, whose writings he often quotes. The work by which he is principally known is entitled *Oesterreich über alles, wann es nur will* (1684). It is an attempt to show how by a judicious economic policy the dominions of the House of Hapsburg, whose fortunes were then at a low ebb, might be raised to a higher and more independent position than any other European state. The author seeks to induce his fellow-countrymen to follow the economic methods of France, Holland, and England. The work is based on mercantilist principles; but, along with much that was erroneous or questionable, it contained many important suggestions for the development of the resources of the empire. It enjoyed a great popularity with the author's contemporaries and several succeeding generations, passed through many editions, and had considerable influence on Austrian policy in the 18th century; Joseph II., in particular, is said to have attached great weight to it.

[Roscher, *Gesch. der N. O.*, p. 289.] J. K. I.

HORNER, FRANCIS (1778-1817), born at

Edinburgh, and educated at the university there, was called to the Scotch bar in 1800, but, dissatisfied with the law of his native country, removed to London in 1803, and was called to the English bar in 1807. He was appointed, in 1806, a member of the board of commissioners entrusted with the examination of the claims of the creditors of the Nabob of Arcot, but resigned this post in 1809. He entered parliament in 1806, remaining a member, except for one short period, until his early death, at Pisa. As a young man, Horner was remarkably studious, and, after entering parliament, very rapidly came to the front, so that at the time of his death he was one of the foremost of the Whigs, with a constantly-increasing reputation for oratory, sound knowledge, and remarkable integrity, combined with independence. In 1810 he was elected chairman of the Bullion Committee (see BULLION COMMITTEE, REPORT OF). The first part of this is from his pen: it is a concise exposition of the fallacy then generally held by the directors of the Bank of England and others, that the rise in the price of gold was caused by the foreign demand for that metal. Horner rightly attributed it to the over-issue of paper money. Though the resolutions moved by Horner in the House of Commons, in 1811, in favour of the resumption of cash payments, were defeated, and though the bullionists met with no better success in 1816, yet the effects of the Report, and of the controversy which ensued on its publication, were such, that the act for the resumption of specie payments was passed in 1819, following the lines of the recommendations of the committee. As regards other economic questions, Horner opposed the graduated duties on corn, urged the reduction of the peace establishment in 1816, and spoke against the Alien Bills.

Though originating no new theory in political economy, Horner possessed a very complete knowledge of the science.—D. Stewart considered him his model pupil—and his critical acumen is well illustrated by his strictures on Adam Smith's deductions concerning the bounty on exported corn (*Edin. Review*, No. ix. pp. 190, etc.), and more particularly on Smith's theory of prices (*Letters, passim*): there exists also a letter from him to Malthus, attacking the latter's reasoning on the corn question. Apart from the *Report of the Bullion Committee* and *A Short Account of a late Short Administration* (Pitt's), his only writings are essays in the *Edinburgh Review*, of which he was one of the founders. These articles are all noticeable for his thorough knowledge of his subject, this being a characteristic trait in all that he undertook. The most important of these reviews are:—

Thornton's *Inquiry into the Nature and Effects of the Paper Credit of Great Britain* (Oct. 1802).—Canard's *Principes d'Économie politique* (Jan. 1803).—Lord King's *Thoughts on the Restriction of Payments in Specie at the Banks of England and Ireland* (July, 1803).—Miss Williams's *Political and Confidential Correspondence of Louis*

XVI. (Oct. 1803).—*Cursory Observations on the Act for Ascertaining the Bounties, and for Regulating the Exportation and Importation of Corn*, by an M.P. (Oct. 1804).—*Stewart's Short Statement of Facts Relative to the Late Election of a Mathematical Professor in the University of Edinburgh* (Oct. 1805).—*Earl of Selkirk's Observations on the Present State of the Highlands* (Oct. 1805).

[*Memoirs and Correspondence of Francis Horner, M.P.*, edited by L. Horner (1843).—*Edinburgh Review*, clviii. (1843), pp. 261-99.—Lord Cockburn, *Life of Lord Jeffrey* (Edin., 1852).—Lord Brougham, *Statesmen of the Times of George III.*, 2nd series (London, 1839).] R. H. H.

HORSLEY, W. (1701?-1776?), published, in 1744, a translation of a French *Treatise on Maritime Affairs*, and an adaptation of Frederick the Great's Anti-Machiavel entitled *Lord Theodore's Political Principles*. In 1746 appeared *The Political History of Europe*, containing a collection of public treaties and a curiously crude historical summary. Horsley is credited, in the British Museum and other catalogues with the *Universal Merchant*, London, 1753,¹ of which the real author was Nicolas MAGENS, written Meggens by Adam Smith in his "Digression Concerning the Variations of Silver," bk. i. *Wealth of Nations*.

Horsley is stated to have translated the work from the German; he contributed a dedication to Pelham.²

[Magens himself in *Further Explanations of some particular subjects contained in the Universal Merchant*, London, 1756, says, "I will add . . . to those, which I ventured to assert in a book upon this and other subjects, published by Mr. Horsley under the too pompous title of the *Universal Merchant*." The authority for the statement that the book was a translation from the German and the translator Horsley is Sir James Steuart, *Inquiry into the Principles of Political Economy*, vol. ii. p. 158, London, 1767, 4to. Otherwise there would be much to suggest that the book was written in English. For Horsley's connection with Magens, see, further, *Quarterly Journal of Economics*, vol. v. p. 356, *Annual Register*, xix. p. 123.] H. E. E.

¹ The title is as follows:—*The Universal Merchant*, containing, etc., London. Printed by C. Say, for W. Owen, at Homer's Head, near Temple Bar. MDCCLIII.

² To the Right Honourable Henry Pelham, Esq., etc. This Book, calculated for General Use, is with the Greatest Respect, etc., inscribed by William Horsley.

Sir—I have the Greater Pleasure in presenting this Work to your Consideration, as it is the Performance of a Foreigner resident among us who participates with us the Sweetness of Liberty, and who gratefully makes us the best Returns in his Power, for the Benefit he receives from the due Execution of equal Laws. . . .

His views, in the reasoning Part, are to establish an universal social maxim. . . .

The Author, after reasoning the Reader into right Notions of Trade, where he falls into many of Mr. Wood's Sentiments, enters into an Enquiry. . . .

His manner of pursuing those Subjects is different from anything I have seen. . . .

—The Performance in a particular manner claims your patronage, as the Author, though an *Alien* by birth, is a *Englishman* by Interest. . . .

HOSPITALS. See CHARITY.

HORTON, SAMUEL DANA (1844-1895), a leading American writer upon bimetalism, was born in Pomeroy, Ohio, and died in Washington. He graduated at Harvard University, in arts in 1864, and in law in 1868. After some foreign travel he began the practice of his profession in the Ohio courts, but was diverted from this after a few years to the study of monetary science, by the protracted discussions which preceded the resumption of specie payments by the federal government. As the son of Valentine B. Horton, who as a member of congress in the early part of the civil war secured wide reputation, but also the displeasure of his constituents, by a courageous opposition to paper money inflation, Dana Horton had an inherited interest in questions of currency. From the publication of *Silver and Gold* in 1876 until the end of his life the study of these were his absorbing pursuit. He was a commissioner for the United States in the International Monetary Conferences of 1878 and 1881, and became widely known in Europe and America as an advocate on scientific grounds of international bimetalism. The independent action of the United States in 1878 and 1890 he condemned. "We should offer Europe to take silver as money without stint when she does, but not take a dollar until she does so." Among the impatient or interested advocates of unrestricted silver coinage therefore he did not retain the authority to which his ability and learning entitled him. His researches in the history of the single and double standards of England and France respectively were fruitful and important. He was a frequent speaker and writer of great vigour, originality, and variety of resource, in a style sometimes striking, but often too involved and abstruse to be thoroughly effective.

Omitting many pamphlets, articles, and addresses, the following are the chief of Mr. Horton's publications, valuable for their research and the number of important original documents which they contain—

Silver and Gold, and their relation to the Problem of Resumption (1876, revised in 1877).—*Historical Material for the Study of Monetary Policy, and Contributions to the Study of Monetary Policy*, both prepared for the International Conference of 1878, printed with the proceedings of the Conference by the United States government 1879, and including a bibliography of money, and documents to illustrate the monetary history of France, England, and the United States—some here printed for the first time.—*Sir Isaac Newton and England's Prohibitive Tariff upon Silver Money*, being an open letter to Professor Jevons (1881).—*The British Standard of Value*, being an address before section F of the British Association (1885), with an appendix containing hitherto unnoticed reports by Locke and Newton.—*Silver before Congress in 1886*, in the *Quarterly Journal of Economics* (October 1886).—*The Silver Pound*

and England's Monetary Policy since the Restoration, together with the History of the Guinea, (1887). *Silver in Europe* (1890, revised in 1892). —*The Suspended Rupee and the Policy of Contraction in the Economic Journal* (September 1893). [See Obituary by Pres. E. A. Walker in *Economic Journal*, June 1895.] C. F. D.

HOTCHPOT. It frequently occurs in wills and settlements that power is given to a person to appoint a fund in such shares as he or she shall think fit among the members of a class, e.g. the children of a marriage; in such cases there is generally a direction that if the appointments made by the person to whom the power is given do not exhaust the fund, the unappointed part is to be divided in equal shares among all the members of the class. If nothing further were added injustice might easily result, and for that purpose a clause called the hotchpot clause is generally inserted, providing that no member of the class shall take a share of the unappointed part, without bringing the appointed share into "hotchpot," which means that for the purposes of the division the appointed share must be thrown back into the common fund. E. S.

HOUGHTON, JOHN, an apothecary and dealer in tea, coffee, and chocolate, was a fellow of the Royal Society and a friend of Halley and other distinguished men of the day. From 1692-1703 he edited a weekly paper called *A Collection for Improvement of Husbandry and Trade*, containing articles on "some matter of public interest in art or science or trade, a price list of corn and some other commodities, from many English market towns, and a number of advertisements" (Rogers, see below). From 17th August 1694 to 17th September 1703 he also kept a weekly register of the price of Bank of England stock, and often of other stock, especially of the East India, the Hudson's Bay, and the African companies; as well as of the "rate of exchange, especially with Amsterdam." He also drew up *An Account of the Acres and Houses, with the Proportional Tax . . . of each County in England and Wales*, 1693.

[Thorold Rogers, *The First Nine Years of the Bank of England*, Preface. The weekly prices of bank stock are prefixed to this book.—Andrew's *Hist. of Brit. Journalism*.—*Dict. of National Biography*.] E. G. P.

HOURS OF LABOUR. In strictness, economics are not concerned with the amount of the day which should be given to work. The capacity of the individual for valuable work varies enormously. By stress of facts a political question has arisen in most civilised countries as to the number of hours which the manual labourer should be required to give to his employer each day. The scope of the practical question has thus, whether rightly or not, been distinctly limited.

There are three points of view from which the question may be regarded—(1) that of the

dependence of the labourer on his employer; (2) that of the improvement of the individual life and happiness; (3) that of the effects on the value of the labour given.

The first two have in turns been uppermost in the minds of those who have advocated the shortening of the hours of labour. The last point of view is one which has only recently attracted real attention in connection with the eight hours movement, though the earlier economists had some notion of it (*vide* J. S. Mill, bk. i.). Yet the most practical method of treating the question of the hours of labour is to establish, if possible, the fact that the work is so much better done on the shorter hours as to make up for the loss of mere time. Professor Thorold Rogers appears to have been the first to suggest this as a practical argument when he held that the excellence of the old masonry and other enduring work of the middle ages was only compatible with the prevalence of short hours. It has recently been asserted by Australian employers that the quality of work has vastly improved with the eight hours day. The most detailed attempt to prove the position is perhaps that of Mr. Rae (*Contemporary Review*, October 1891). It is clear that if the case be made out, the adoption of shorter hours will quickly follow; and it is obvious that greater leisure ought to be better for the individual workman, and that with a rising standard of life he must become more independent without being less useful.

In Great Britain the attempt to legislate on this subject seems to have been much earlier than on the continent. Putting aside Professor Rogers's theory just noted, and Sir Thomas More's proposed 6 hours for the Utopia, we have an act of Elizabeth prescribing a day of 12 hours with 2½ hours' rest, and we know that at the beginning of this century the usual working day was from 11 to 14 hours, and often longer, in the factories. The early factory acts were directed to the relief of young children and women. That of 1802 was the first, limiting the hours for children to 12 a day; that of 1819 placed the hours for children between the ages of nine and sixteen at 72 per week; and that of 1825 gave them a Saturday half-holiday. Sir John Hobhouse's act of 1831 reduced the hours for persons under eighteen to 69 per week. The reports of the factory commission (1832-33) took a wider view of the subject. They show that while the working day in many cases at that date ran to 13 hours, it often did not exceed 10 or 11, and was usually 12 to 12½. In Birmingham and Coventry, where the operatives worked, as they now do, chiefly at their own homes, and were independent, the day was usually less than 10 hours, often less than 9. It was about this time that Richard OASTLER and Lord Shaftesbury commenced to advocate a legal maximum of 48 hours per week, which

was adopted for children in the regulations for children under thirteen in the act of 1836. The Mines Regulation Act of 1842 was the next step in advance, and after the failure of a ten-hours bill for females in 1844, and of a similar bill for all persons in 1847, the legal day was made 10 hours in 1850. Apart from a certain agitation for further reduction, no advance was made on this till the Factory Act of 1874, which placed the limit at $56\frac{1}{2}$ hours per week. The recent royal commission find that they have now a tendency to approximate to 54 a week. Recent efforts are dealt with in a separate article (EIGHT-HOURS MOVEMENT), but we may mention the Hours of Labour Bill in the session of 1891, and the Shop Hours Acts of 1892, under which no person under eighteen can be employed for more than 75 hours a week in shops.

In the British possessions there is little trace of a history similar to that of the FACTORY ACTS, but as a rule hours of labour are shorter than at home, and Australia is in advance of the whole world in this respect, as the eight hours system has there become thoroughly established since it was first adopted by the stonemasons of Victoria in 1856 (*vide art. cit.*). In Canada 10 hours is usual, but 9 hours not uncommon. At the Cape 9 hours is the usual length of the working day. In the tropics the style of labour is so different that the mention of any number of hours is hardly a fair criterion. The blue book of the recent royal commission on labour returns them at from 6 to 11 a day in the West Indies, and from 1 to 14 in India.

In most foreign countries there has been a slow growth of agitation in favour of a shorter working day, mostly following in the wake of English experience. Germany has had a special movement arising directly from the efforts of KARL MARX and his school. The United States have had the question settled almost without being raised, owing to the greater independence of labour and the greater profusion of apparent wealth amongst all classes.

In the same district we find different trades working different hours, even in our own country. There seems to be no regular principle determining this. Particular trades have obtained shorter hours by some special agitation often arising out of special events. Where, however, a direct service is rendered to the general public, as in tramcars and restaurants, hours tend to run to greater length.

And different reasons have conspired to bring about the shortening of hours in our own country and the colonies—e.g. in Australia climate was alleged as a factor.

[Hadfield and Gibbins, *A Shorter Working Day*.—Ricci dalla Volta, *La Riduzione delle ore di lavoro e i suoi effetti economici*, Florence, 1891.—Webb and Cox, *The Eight Hours Day*, 1891.—J. G. Hobson in *Contemporary Review*, 1894-95.—

Report of the Royal Commission on Labour—Parl. Paper C. 7421, 1894, p. 12, with the subsidiary reports and evidences especially, C. 6795-xi. f. 1893 (Colonial) and C. 7063, f. 1893-94 (Foreign), which form a very full account with full indexes in separate volumes *passim*.—*First Report of the Factory Commission of 1832*.—Schoenhof, *Economy of High Wages*, Putnams, 1892.—Rae, *Eight Hours' Day*, 1894.] C. A. H.

HOUSES, TAXES ON. See TAXATION.

HOWARD, JOHN (1727-1790), was the originator of the modern method of dealing with criminals. His career as a reformer dates from his appointment as high sheriff of Bedfordshire in 1773, when, struck with the abuses in the management of gaols, he was led to visit the prisons throughout the kingdom, and afterwards travelled several times over the whole of Europe, devoting his life to the inspection of prisons and hospitals. In his zeal to learn the true facts or to bring relief to prisoners, he never shrank from exposing himself to the infection of gaols, hospitals, and lazarettos; and ultimately died at Kherson of a fever which was raging there. The facts collected during these journeys were laid by him before the government, and many humane reforms were introduced on his suggestion, the most immediate of which were the two acts of parliament passed in 1774, for the relief of acquitted prisoners in the matter of fees, and for preserving the health of prisoners. He was also successful in introducing reforms in many foreign countries. Among those who most fully recognised his merits was Burke, whose eulogy of Howard, in his speech at Bristol in 1780, is well known. Howard's works include observations on the condition, both administrative and structural, of prisons, hospitals, lazarettos, etc., throughout Europe, together with proposed reforms. In preparing these for the press, he was greatly aided by his friend, Richard PRICE. Howard also paid much attention to the condition of the tenants on his estate at Cardington in Bedfordshire, providing sanitary cottages and schools.

The state of Prisons in England and Wales; with preliminary observations, and an Account of some Foreign Prisons and Hospitals, Warrington, 1777.—*An Account of the Principal Lazarettos in Europe, with various Papers relative to the Plague; together with further Observations on some Foreign Prisons and Hospitals; and Additional Remarks on the Present State of those in Great Britain and Ireland*, Warrington, 1789.

[J. Aikin, *A View of the Character and Public Services of the late J. Howard*, London, 1792.—W. A. Guy, "John Howard as Statist," *Journal of the Statistical Society*, vol. 36, and "John Howard's True Place in History"; *ib.* vol. 38.—Three Prize Essays, by A. Griffith, A. Rivière, and E. A. Cazalet, in *Actes du Congrès Pénitentiaire International* (1890), vol. v., St. Petersburg, 1892.]

R. H. H.

HOWE, JOHN BADLAM (1813-1882), born in Boston, Mass., died in Indiana.

He was the author of several works on money, as follows: *Monetary and Industrial Fallacies*, Boston, 1878, pp. 248.—*Political Economy of Great Britain, United States, and France, in the use of Money*.—*A New Science of Production and Exchange*, Boston, 1878, pp. 592.—*Monometallism and Bimetallism*, Boston, 1879.—*The Common Sense, the Mathematics, and the Metaphysics of Money*, Boston, 1881, pp. 329. The last of these is a summary of the others. D. R. D.

HOWLETT, JOHN (1731-1800), clerk in holy orders and statistician. Howlett's works merit attention on account of his independence of thought and careful investigation of fact. His researches brought him into considerable opposition to Dr. PRICE (*q.v.*) who—writing in 1779—concluded that the population of England and Wales must have decreased since the Revolution near a quarter, while Howlett showed that it must have increased. With reference to enclosures, at that time of great consequence, Howlett consistently maintained that they were rendered necessary by the increase in population, and resulted in agricultural improvement.

The nature of Howlett's interests can be gathered from the titles of his works:

An Examination of Dr. Price's Essay on the Population of England and Wales, 1781.—*An Inquiry into the influence which Enclosures have had upon the Population of England*, 1786.—*An Essay on the Population of Ireland*, 1786.—*Enclosures a cause of improved Agriculture*, 1787.—*The insufficiency of the causes to which the increase of our Poor and the Poor's Rates have been generally ascribed*, 1788.—At the end of Wood's *Account of the Shrewsbury House of Industry*, is a correspondence with Howlett, 1795.—*An Examination of Mr. Pitt's Speech in the House of Commons on 12th February 1796, relative to the condition of the Poor*, 1796.—*Dispersion of the present gloomy apprehensions of late repeatedly suggested by the decline of our Corn Trade*, 1798.—*The Monthly Reviewers reviewed*, 1798.—*An Inquiry concerning the influence of Tithes upon Agriculture*.

[See references in Dugald Stewart, *Lectures on Political Economy*. An article in the *Dictionary of National Biography* by the present writer gives more details with regard to Howlett's private life, etc.] E. C. K. G.

HÜBNER, OTTO (1818-1877), first a merchant, subsequently manager of one of the departments of the Austrian Lloyd Steam Boats Company, made himself prominent as one of the leaders of the German free-trading party. Exiled from Austria after the revolutionary events of 1848, he spent the remainder of his life in Berlin, and supervised, from 1852, the publication of his *Jahrbuch für Volkswirtschaft und Statistik* (Year-book of Public Economy and Statistics), and from 1869 the *Zolltarife aller Länder* (Customs Tariffs of all Countries).

In his book on *Banken* (1854) he maintained that paper currency ought always to be covered by an equal amount in cash. In 1864 he started with success a joint-stock insurance company destined to protect lenders on mortgage against the risks incurred in case of public sales of real estate given in guarantee of loans.

He also wrote a book on the *Finanzlage der Oesterreichischen Monarchie und ihre Hülfsmittel* (Financial Condition and Resources of the Austrian Monarchy) (1849). [See *Allg. Deutsche Biographie*.] E. C. A.

HUC, E., ABBÉ (1813-1860). After having resided in and travelled through China, Tartary, and Thibet during the years 1839-1846, this well-known French missionary published in 1850 his *Souvenirs d'un Voyage dans la Tartarie, au Thibet, et en Chine* (2 vols., 1850) with a sequel *L'Empire Chinois* (2 vols., 1857); the latter contains numerous notices and observations on trade, administration, navigation, etc. The fourth chapter of vol. ii. deals almost exclusively with these subjects, and gives some extracts from Chinese writers on the same topics. The same volume (pp. 72-83) presents us with a lively sketch of Wang-nan-Che, a Chinese socialist and harbinger of Mr. Henry George's views on the nationalisation of land, who lived in the 11th century after Christ.

The *Empire Chinois* obtained a prize from the French Academy, and has been translated into English; the Abbé Huc certainly does not belong to the class of "stupid" missionaries who excited the contempt of Adam Smith. E. C. A.

HUDSON'S BAY COMPANY. After the voyage of adventure and discovery of Captain Newland in 1669, a charter was granted (May 2, 1670) to the adventurers who had taken part in sending out that expedition, constituting them a company with exclusive trading rights in Hudson's Bay and the surrounding district, by the title of *The Governor and Company of Adventurers of England trading into Hudson's Bay*. Though after the revolution the power of exclusive trading based on royal charter came to an end in this and in other instances, the charter of the Hudson's Bay Company was confirmed by act of parliament for seven years; and the capital possessed by the company, with, in addition, the settlements and forts already founded practically secured it against competition. The company had, however, to endure the direct hostility of the French, who pressed into the territory traversed and worked by the company from Canada. By 1682 the company had five settlements, respectively at Albany River, Hay's Island, Rupert's River, New Severn, and Port Nelson, but with the exception of the last-named, these were all taken by the French in 1686. During the subsequent French war success fluctuated, inclining, however, to the side of the French. By the peace of Utrecht (1713) the forts were re-

stored to the company and reparation promised. This promise does not appear to have been satisfactorily fulfilled.

During the middle of the 18th century the company sustained a severe assault on its powers and privileges, as it was alleged that despite these it had done little or nothing to open up the territories under its control. Its trade was not great. A parliamentary inquiry instituted in 1749 reported at length but no action followed upon it. Over some of the lands the company had acquired definite legal rights, while throughout the whole country it claimed certain privileges.

In 1811 its rights came once more under dispute, and a considerable struggle took place between it and its chief competitor, which ultimately resulted in a coalition against all others.

The company still remains and carries on trade, though the purchase of its territory (1868) by the Dominion of Canada deprived it of any remaining claim to any powers beyond those of an ordinary trading company.

[Macpherson, *Annals of Commerce*.—Cunningham, *Growth of Engl. Industry and Commerce*, vol. ii.—Adam Smith, *Wealth of Nations*, bk. v. ch. i., as to the Trade of the Company.]

E. C. K. G.

HUET, FRANÇOIS (1816-1865), the author of *Le règne social du Christianisme* (1853), a liberal Roman Catholic, the representative of what he terms ideal Catholicism, and a social idealist whose theories do not vary much from those of modern "social catholics" in France and Belgium (see CHRISTIANITY AND ECONOMICS). M. de Laveleye's high opinion of this writer's views was fully expressed on p. 137 of the 2nd edition of his *Socialisme Contemporain*. It is to F. Huet and J. S. Mill that De Laveleye dedicated his work on primitive property. Huet is equally opposed to individualism, as being founded on materialism, and to communism as the child of pantheism. He advocates liberal socialism as lying midway between the two extremes, and as resting on a theistic foundation or spiritualistic philosophy. Hence in the second book of his work he treats of "la Société spirituelle," in which the religious interest stands highest, whilst the third book is devoted to "la Société matérielle." In the latter he draws a distinction between "les biens patrimoniaux" and "biens acquis." The latter only was the result of individual labour, and as such can be claimed as private property. The former belong to society as a whole, such as land, etc., the gifts of the earth to which all have an equal right. These should return to the community, as public property, on the death of the present occupier. The first article of Huet's right of inheritance is as follows: Every year a division takes place of the *biens patrimoniaux* released by death. All young people of both sexes aged from fourteen to

twenty-five have a share in it, the latter receiving twice the amount of the former. From this it will be seen that the standpoint of the author is that of an advanced Christian Socialist, whose endeavour it is to prove the identity of Christian liberty and the socialistic idea.

[F. Huet, *Le règne social du Christianisme*; cp. an article by G. Kriegmann in *Preussische Jahrbücher*, January 1887.] M. K.

HUET, PIERRE DANIEL (1630-1721), member of the French academy, and tutor under Bossuet of the son of Louis XIV., directed the publication of the editions *ad usum Delphini* of classical authors, and enjoyed in his time a great celebrity for his erudition, which was rather wide than deep. He wrote several books of religious and philosophical controversy, autobiographical memoirs (in Latin, but since translated into French by M. Nisard), and a *Dissertation on Navigation under Solomon* (1698). Appointed bishop of Soissons in 1685, he had not yet taken possession of his see when he was transferred in 1689 to the bishopric of Avranches. Shortly afterwards he retired to the abbey of Fontenay near Caen, to devote himself entirely to his learned researches. People wondered why the king had appointed a bishop who had not yet reached the end of his studies.

His *Histoire du Commerce et de la Navigation des Anciens* (1 vol., issued anonymously in 1716, and republished in Lyons in 1763, with the author's name) had been written at the request of Colbert, a long time before it appeared. Commencing at the creation, and including the Persians, Chinese, etc., this book is certainly a rather shallow production, but to be fair, we ought to remember what Huet himself stated in his dedication to Colbert: "Only such an authority as yours could draw me away from the studies which have always engrossed my attention, to direct it towards another so different. . . . No forerunner has opened the road for me, I had no guide to lead me, and no support on which I could lean" (See "Huet," in *Collected Essays*, by Rev. Mark Pattison, Oxford, 1889).

E. ca.

HUFELAND, GOTTLIEB (1761-1817), a distinguished German economist, was born at Dantzig, studied at Leipzig, Göttingen, and Jena, and became in 1788 extraordinary, and in 1793 ordinary, professor in the university of the last-mentioned place. He passed in 1803 to the high school of Würzburg, and in 1806 to that of Landshut. From 1808 to 1812 he was bürgermeister of his native city, then republican; in the latter year he returned to Landshut, where he resumed his academic occupations, and in 1816 removed to Halle, where in 1817 he died. His principal economic publication—for he also wrote on jurisprudence—was *Neue Grundlegung der Staatswirtschaftskunst durch Prüfung und Berichtigung ihrer Hauptbegriffe*, vol. i., 1807; vol. ii., 1813.

The second volume appeared in a new edition, 1819, with the title *Die Lehre vom Gelde und Geldumlaufe*. His principles were essentially those of Adam Smith, of whom he speaks with warm admiration in the preface to his work; and he did much to extend the knowledge and acceptance of the English economist's doctrine in Germany.

[Roscher, *Gesch. der N.O.*, p. 654.] J. K. I.

HÜLLMANN, KARL DIETRICH (1765-1846). Appointed professor of history in 1797 at the university of Frankfurt on the Oder, and in 1808 of history and statistics at Königsberg, Hüllmann was sent in 1817 to Bonn, where he was the first rector of the then recently-inaugurated university; for years he acted as the confidential representative of the Prussian government. His literary activity was considerable, as appears from the long list of his historical works.

As an historian, Hüllmann had a decided conservative bias, modified however by the liberal tendencies of the times in which he lived. This appears very clearly from the address to the Germans (*Zuschrift an die Deutschen*), which serves as a preface to the second edition (1830) of his *Geschichte des Ursprungs der Stände in Deutschland* (Origin of the (political) Classes and States in Germany). His best-known work is the *Städtewesen des Mittelalters* (Town Life and Administration in the Middle Ages), 4 vols. Bonn, 1826; "This is still," writes Prof. Ashley in his *Ec. History* (vol. i. pt. ii. p. 5), "the most complete attempt to cover the whole ground of mediæval civic life, and it illustrates the general similarity of conditions all over Western Europe." His other works are *Deutsche Finanzgeschichte des Mittelalters* (1805), giving the history of the mediæval finances of the German empire, not of the various German states, with a supplement on the origin of regal dues (*Ursprung der Regalien in Deutschland*, 1806); *Geschichte der Domänenbenutzung in Deutschland*, 1807 (History of the Management of the State Domains in Germany); *Gesch. des Byzantinischen Handels* (Hist. of Byzantine Commerce), 1808; *Handelsgeschichte der Griechen* (Hist. of Greek Commerce), 1839; he also wrote on the Political Systems of the Ancients (*Staatsrecht des Alterthums*, 1820); the Origin of the Mediæval Ecclesiastical System (*Ursprünge der Kirchenverfassung des Mittelalters*, 1831); the Roman and the Jewish constitutions, etc. E. CA.

HUMANISM, ITS INFLUENCE ON ECONOMICS. By humanism we mean that tendency of the earlier and later Renaissance which makes the culture of humanity its chief aim, and which in its anthropocentric view of life affects in a marked degree the course of economic theory and practice. As a revolt against the mediæval views of life, being pagan in its origin, it attaches supreme importance to human happiness here below, and puts temporal above spiritual interests. Humanism, in short, as Mr. Symonds defines it, "is an ardent interest in men as men." Hence the beauty of the human

form as in classical art, of human virtue according to classical models, and human rights and liberty as conceived of in the republics of antiquity, are its ideals. Thus ROSCHER notes five points of contact between the progress of humanism and that of political economy. (1) As the classical writers represent a high state of civilisation, they raised the general standard of culture and tended to accelerate efforts in the division of labour and the economy of wealth as means thereto; (2) As the higher life of the ancients was mostly developed in the town, so a study of the classics would help in giving force and direction to civic industry of the rising towns towards the close of the middle ages; (3) The patriotism breathing in the classics would stimulate the consciousness of national life and thus encourage the centralising tendencies of "national" economy; (4) The mixed elements of imperialism and democracy reflected in the classical writers would on the other hand foster monarchical absolutism as in the mercantile system, and also its democratic counterpart in the *laissez-faire* doctrine of political economy; (5) The cultivation of the critical spirit of the humanist, which, undermining as it did the foundation of authoritative religion, tended to disparage the spiritualistic ideals of life held up by Christianity in favour of material aims and materialistic pursuits in the place of heavenly felicity. It will be convenient to consider the influence of humanism under these five heads:

1. *Classical culture*, with the revival of learning, brought into prominence the economical doctrines of ARISTOTLE and PLATO, the theory both of state and household economy (*πολιτική επιστήμη* and *οικονομία*) from which political economy derives its modern appellation. Aristotle's doctrine of wealth (*χρηματιστική*) and Plato's ideas of the division of labour, and his view of the danger of private property, contain the germs of the science. In a lesser degree this is true of Cicero, Seneca, and Pliny the elder, the first of these, as translator of the *Economics* of Xenophon, being among the earliest economists who show a decided preference for agriculture over manufactures and trade (see Professor Cossa's *Introduzione allo Studio dell' Economia Politica*, 1892, pp. 149 *seq.*; *ib.* 160-161, English edition 1893; *ib.* 129-140). Not only philosophers and jurists in the 14th century, but humanists such as GÉRON, who paid much attention to the theory of value, follow Aristotle (*ib.* 102-105), whilst in the 15th century, when the progress of industry and literary culture were at their height, we find Erasmus platonising in his warnings against over-estimating the accumulations of wealth, yet at the same time with Aristotle recognising the importance of commerce, and of money as a means of exchange. Another typical humanist, Ulrich von Hutten, inveighs against luxuries

and monopolies, whilst CAMERARIUS, one of the younger humanists, combated mediæval objections to payments of interest. MORE's *Utopia*, like *The Christian Prince* by Erasmus, bears witness to the influence of classical modes of thought; the keynote in both is "that the object of nations and governments is the common weal of the whole people."

2. *Civic Industry*.—It was in Italian republics, in cities like Florence for example, that the spirit of the Renaissance found its fullest expression (see CITY, MEDIÆVAL); and here, too, the classical ideal of an urban or municipal republic was most closely approached. As the classical modes of industry were reproduced, so here, too, with heightened prosperity and luxurious refinement, we meet the same sharp contrast between rich and poor as of old. There are conflicts between the merchants and the craftsmen: and Savonarola, in one of his sermons, recommends the passing of a law for opening shops and providing work "for the populace now idling in the streets." In estimating the effect of humanistic studies on economic progress there is room for divergency of opinions. Thus, according to Mr. Symonds, "fresh value was given to the desires and aims, enjoyments and activities of man, considered as a noble member of the universal life" (*Revival of Learning*, pp. 46-47). On the other hand Mr. W. S. Lilly, *Nineteenth Century*, p. 5 (Jan. 1893), speaks thus disparagingly of the Renaissance: "It might with far greater truth be called a new birth into servitude. This it was assuredly, both in the political and economic order." It has been noticed, too, how in the Germanic towns the energising influence of revived and reformed Christianity, and its consecration of honoured labour, modified the enervating effects of the Renaissance and militated against the classical contempt of handicrafts. We might select as an illustrative instance of this the "city" of London with St. Paul's as the temple of the Renaissance, and the school close by founded by the humanist Dean Colet, with the Royal Exchange founded about the same time in the vicinity of Lombard Street, as bearing the various traces of a contemporary development of commerce, and culture, and religion, under the conjoint influence of the Reformation and Renaissance—an instance showing the truth of M. E. de Laveleye's dictum that "the countries which have embraced the Reformation are decidedly in advance of those which have stopped short at the Renaissance. . . . The Renaissance was a return to antiquity, the Reformation a return to the gospel. The gospel being superior to the tradition of antiquity, was sure to yield better fruits" (*Protestantism and Catholicism in their bearing upon the liberty and prosperity of Nations*, p. 82).

3. *Patriotism*.—The pagan view of tribal

morality, and its tendency to subordinate the interests of the individual to those of the community, and which as in the neo-paganism of our own time attempts to find in it a kind of substitute for religion, as an antidote against "de-ethicising" influences of scepticism, exercised an important influence on the development of economics in the humanistic era. For the growth of national sentiment stimulated national egoism, and on this is founded the MERCANTILE SYSTEM of political economy. In this respect the effects of the Renaissance were similar to those of the Reformation (see CHRISTIANITY AND ECONOMICS: "Influence of Protestant Thought").

4. *Imperialism and Democracy*.—The humanists, too, like the reformers, and, it might be added, like the rising towns, had a strong leaning towards royalty and regal protection in the struggle against the common enemy, the rude feudality and barbarian aristocracy of the day. Hence they encouraged royal absolutism. In economics this produced *Colbertism*, or the centralisation of trade and commerce and the establishment of royal monopolies. It also led to the creation of "state romances," or pictures of ideal commonwealths like Fénelon's *Voyage en Salente*, in which an important rôle is assigned to benevolent despotism in the economic management of the state. This is in strict correspondence with the classical conception that the head of the state like the head of the family has the *patria potestas*, hence the idea of patriarchal government as the representative of the state. Royalty, as Guizot puts it, was "la personnification de la souveraineté du droit," just as in imperial Rome the head of the state was "la personnification de l'État, l'héritière de la souveraineté et de la majesté du peuple romain" (*Histoire de la civilisation en Europe*, 6th edition, pp. 221 and 228). Thence were derived the earlier cameralistic and later bureaucratic methods of national economy culminating in the *Ancien Régime*, during which, "en pleine renaissance," to use the words of De Tocqueville, it was the fashion to consider "le droit de travailler comme un privilège que le roi peut vendre" (*Ancien Régime*, p. 154). The reaction against this was the individualism of the revolution, in which the opposite or democratic conception of individual rights finds its expression. "The whole movement of humanity from the Renaissance onward has tended in this direction, i.e. the Utopia of a modern world in which all men shall enjoy the same social, political, and intellectual advantages"—in short, "the organisation of society in harmony with democratic principles" (Symonds: *Renaissance in Italy*: I. *Age of the Despots*, p. 30). In the same way Rousseau's demand for a return to nature, where all are free and equal, has been traced to a revival of classical stoicism, and the passionate enthusiasm of French lawyers for "natural law," the *jus*

nature of Hobbes and Grotius, on which is founded the theory of the rights of men and the demand for natural liberty extended to commerce and economics. This was adopted by A. Smith from the physiocrats, whose chief dogma is to leave everything to nature and natural laws, and not to interfere with the play of natural forces; *i.e.* in the language of A. Smith, not to interfere with the obvious and simple system of natural liberty in the economic world. In this demand appeals are made constantly to the "ancients" by revolutionists in their cries for liberty and equality, as the article on political economy written for the *Encyclopædia* by Rousseau "rings with the names of ancient rulers and lawgivers" (see Morley's *Rousseau*, vol. i. 145 and 191 *seq.*), whilst one of the chief promoters of the doctrine of *laissez-faire*, the Marquis D'ARGENSON, looks to the ancient Greek republics as ideal communities where true liberty prevailed. But from this doctrine of "following nature" are derived other doctrines of "classical economy," such as the "natural increase of capital," and the "natural right of property," which produced in their turn great inequalities, and led on to the socialistic reaction in favour of collectivism and revolt against the power of "capitalism." The latter leans itself for support on the Roman law of private property, just as government direction of trade and commerce was an imitation of classical Caesarism. Thus both the idea of individualism in the sense of personal liberty, and the collective individuality of the state, the leading doctrines of abstract and historical methods of political economy respectively, may be traced to the influence of classical conceptions revived by humanistic studies under the two-fold aspect of society as a collection of free citizens under the rule of popular sovereignty and a corporate personality with imperial power as the central organ of government, the two modern autonomies in politics and economics alike having for their object on the one hand the independence of man, and on the other the centralisation of society.

5. *Criticism.*—The critical spirit which humanistic studies and the contemporaneous progress in the natural sciences both in the 15th and 18th centuries called forth was antagonistic to the spiritualistic conceptions of Christianity. The epicureanism of the *Novi Homines* of the Renaissance and the naturalism of the Encyclopædists of the Revolution had for their aim either the culture of human nature, or the use of the newly-discovered forces of nature for the purpose of heightening the "splendid materiality" which captivated all minds then as now. In short, literature, art, and science were all to serve the purpose of terrestrial happiness. The effect of this on political economy as the science of wealth was stimulating. It directed all effort now set free

towards the acquisition of material goods, as, also, it received a special impetus from the contemporaneous liberation of mind, and the growth of commercial enterprise owing to the revolution of prices in consequence of the discovery of America in the 15th, and the revolution of industry by steam and machinery in the 18th centuries. These combined in awakening both the spirit of curiosity and cupidity, the love of learning, and the lust of money as the result of the "outburst of new life, the carnival of liberty and energy." The development of the individual and the progress of society was the superstructure built, or attempted to be erected, on this material basis. Later on the philanthropic or humanitarian as distinguished from the purely humanistic elements of the earlier and later Renaissance are brought into prominence with the characteristic appearance of the "religion of humanity." A corresponding movement in political economy arises which seeks to incorporate it into the science of society, having for its paramount object the evolution of humanity. Henceforth the "economic man" is no longer considered merely in his relation to the community as in classical times, or as the "man as a machine" moved by self-interest and made what he is by the mechanism of natural laws, as in the natural revival of the last century; but he is now considered as a social unit in his relation to aggregate humanity, pursuing a higher ideal intellectually and morally, *i.e.* the highest development of man and society (see CARLYLE; CHRISTIAN SOCIALISM; A. COMTE).

[Refer to J. A. Symonds on the *Renaissance in Italy*, cited above.—W. ROSCHER, *Geschichte der Nationalökonomik in Deutschland* (1874).—H. Eisenhart, *Geschichte der Nationalökonomik* (1881).—A. Oncken, *Die Maxime laissez-faire et laissez passer, ihr Ursprung, ihr Werden* (1886); *Adam Smith in der Culturgeschichte* (1874).—H. von Scheel, *Geschichte der politischen Oekonomie in Handbuch der politischen Oekonomie*, 3rd ed. (1890).—Luigi Brentano, *Die klassische Oekonomie*, Vortrag (1888).] M. K.

HUMBOLDT, ALEXANDER VON, Baron (1769-1859). Besides his writings on natural sciences, the following works of this celebrated traveller, written in French and published in Paris, are entitled to be noticed from the economic standpoint: *Voyage aux régions équinoxiales du Nouveau Continent* (1807); *Essai politique sur la Nouvelle Espagne* (1811); and *Essai politique sur l'Île de Cuba* (1826), as well as *l'Examen Critique de l'Histoire de la Géographie du Nouveau Continent et des Progrès de l'Astronomie Nautique aux XV^e et XVI^e Siècles* (1834). In 1848, the *Journal des Économistes* published a translation of his historical and statistical *Mémoire sur la Production de l'Or et de l'Argent considérée dans ses Fluctuations* (also printed separately, with a preface by M. Michel Chevalier) which had appeared several years before in a German quarterly review (*Ueber die Schwank-*

ungen der Goldproduktion in Deutsche Vierteljahrschrift, October 1838). It is interesting to notice that in this *mémoire* Humboldt predicts that new silver mines will one day be worked in northern America; he expects the future source of gold supply to be the Altai mountains in Central Asia. E. ca.

HUMBOLDT, WILHELM VON (1767-1835), brother of Alexander von Humboldt, the traveller, was descended from a noble family in the Mark of Brandenburg. He was early associated with the celebrated Weimar circle, and much influenced by Goethe and Schiller. One of the foremost scholars of his age, renowned in literature, aesthetics, and the science of language, he fills a large space in the intellectual history of Germany. He ranks among economists by virtue of his work, written when he was still a young man, in 1792, *Ideen zu einem Versuch die Grenzen der Wirksamkeit des Staates zu bestimmen*, not published in full until after his death (by Dr. E. Cauer, Breslau, 1851), in which he pushes to the utmost extreme the limitations of the functions of the state. J. S. Mill in his book *On Liberty* highly commends this "excellent essay"; but, in fact, it so exaggerates the doctrine of objection to government interference as practically to refute it. The author restricts the action of the state to the preservation of external and internal security, and excludes from it all positive solicitude for the prosperity, nay, even the character and culture, of the nation. The immaturity of the ideas expressed in this essay is obvious. In his zeal for the supremacy of the individual, he proposes that marriage should be terminable at the will of either party, and without any allegation of reasons—a suggestion from which Mill thought it necessary to express his *partial* dissent. The most complete *ad hominem* answer to his doctrines is supplied by his own activity at a later date in the cause of educational reform in Prussia. In 1809, immediately after the retirement of Stein, and when Altenstein was minister, Humboldt returned from Rome, where he had been Prussian representative at the papal court, and was placed at the head of the section of public worship and instruction under Dohna, who had the general control of the department of the interior. In this capacity he devoted himself to the reform of education in the primary schools and high schools and crowned his work by the foundation of the university of Berlin, procuring for it a large public endowment. Afterwards we find him turning his attention to finance and public economy, a study in which he was encouraged by Stein, who recommended to him in particular the writings of FORBONNAIS and GANILH. But his most conspicuous activity in later years was in the fields of politics and diplomacy, into which we cannot here follow him.

[Seeley's *Life and Times of Stein*, *passim*.—Dove in *Allg. Deutsche Biogr.*—Good account in R. Fester's *Rousseau und die deutsche Geschichtsphilosophie*, 1890, pp. 292-309.] J. K. I.

HUME, DAVID (1711-76), philosopher, historian, and economist, was born at Edinburgh. He was "seized very early with a passion for literature." After fruitless efforts to apply himself to law and commerce, he paid, in 1734, a three years' visit to France, where he laid down his future plan of life. "To make a very rigid frugality supply my deficiency of fortune . . . and to regard every object as contemptible except the improvement of my talent in literature." In 1738 he published his *Treatise of Human Nature*, which contained, though in bald outline, the substance of the future philosophical writings; and in 1742 the first series of *Essays Moral and Political*, which was favourably received. After a twelve months' tutorship of Lord Annandale, he was appointed in 1746 secretary to General St. Clair, and in this capacity visited the courts of Vienna and Turin, wearing, according to Lord Charlemont, his uniform "like a grocer of the trained bands." *The Enquiry concerning the Human Understanding*, a recast of the first portion of the *Treatise*, was published in 1748. The years 1749 and 1750 were spent at his old home, Ninewells, in the composition of the *Political Discourses*; "The only work of mine that was successful on the first publication"; and in the recasting of another portion of the *Treatise* into the *Enquiry concerning the Principles of Morals*. "Of all my writings, in my own opinion . . . incomparably the best." In 1752, Hume became librarian to the Faculty of Advocates, and planned the *History of England*, successive portions of which appeared in 1754, 1756, 1759, and 1761. In 1753, he wrote the *Essays On Suicide* and *On the Immortality of the Soul*, which were printed, but promptly suppressed. *The Natural History of Religion* was finished in 1757, but was not published during Hume's life. In 1763 Hume accompanied Lord Hertford to Paris, where his stay was a continuous triumph. Among others who were brought to do him honour, were the future kings, Louis XVI. and Louis XVIII. Returning to England in 1766, he was appointed, in 1767, Under secretary of State, an office he held for a year. In 1769 he returned to Edinburgh, "very opulent." Six years later he was attacked by a mortal disease, and met death with the fortitude and cheerfulness of a philosopher. He appointed his friend Adam Smith his literary executor.

In Hume's own words, he was "a man of mild disposition, of command of temper, of an open, social, and cheerful humour . . . and of great moderation in all my passions." In justice, however, it must be added, that his letters display a less pleasing side of his character, and modify,

though they do not reverse, the above verdict. The intemperate extravagance with which everything English is continually condemned, the restless vanity that no praises can satisfy, show the other side to the shield.

It has been asked why the labours of Hume in philosophy came to so sudden an end? "His contributions to metaphysics were written by 1736, when he was five-and-twenty; his contribution to the philosophy of religion by 1750, when he was thirty-nine; and after this date, he added nothing." At least two answers may be given, each in itself perhaps sufficient. Hume dearly loved fame, and the *Essays* obtained what had been denied to the *Treatise*. Again, Hume had nothing in him of the martyr's temperament; he loved to stand well in the thoughts of the great and the respectable; for this purpose Tory politics were more profitable than heretical philosophy. Be this as it may, it is possible that Hume had already made his full contribution to metaphysics, while the gain to political philosophy has been great. The *History of England* need not detain us; if it is still read, it is merely on literary grounds. But the two sets of *Essays*, *Moral and Political*, the later of which was first published under the name of *Political Discourses*, are without doubt κήρυμα ἐς δελ. The original essays, amidst much ephemeral matter, on *Standard of Taste*, etc. (wherein Bunyan and Addison are compared to a pond and the ocean), contain within them a system of political philosophy. The object of government is the distribution of justice; "in other words, the support of the twelve judges." There is a "perpetual intestine struggle" between authority and liberty, of which the former must be "acknowledged essential to the very existence of society," while the latter is "its perfection." Parliament, "while, from our very constitution, it must necessarily have as much power as it demands, and can only be confined by itself," is, in fact, restrained by the interest of the individuals composing it, differing from the interest of the body as a whole, inasmuch as they are individually amenable to the influence of the crown. Absolute monarchy is the "true Euthanasia of the British constitution," as being preferable to pure democracy.

In approaching Hume as economist, it must always be remembered that political economy grew out of political philosophy, and that Hume is still in the transition stage. Although he believes in the possibility of a science of economics, and describes its subject-matter, he does not use the term. The economic essays were published (1752) in a volume entitled *Political Discourses*, and the subjects discussed—commerce, refinement in the arts, money, interest, balance of trade, jealousy of trade, taxes, and public credit—are regarded largely from the statesman's standpoint. In his opposition to the views of the mercantilists, upon the BALANCE OF TRADE (*q.v.*), and the precious metals, he had been forestalled by BARBON and Sir Dudley NORTH. His description of wealth recalls the statement in Berkeley's

Querist, that it consists "of the four elements, and man's labour therein." Even in his theory of interest, Hume had been anticipated by BARBON, and, more recently, by MASSIE. Nevertheless, the lucidity of his style, the subtlety with which the subjects of money and interest, in especial, are treated, and his connection with Adam SMITH, make Hume an important figure in the history of economics.

As an instance of his marvellous acuteness, may be noticed the letter addressed to A. Smith, on the appearance of the *Wealth of Nations*. After cordial congratulations, Hume proceeds at once to seize upon the points most open to criticism. "I cannot think that the rent of farms makes any part of the price of the produce, but that the price is determined altogether by the quantity and demand (*v. RENT*). It appears to me impossible that the king of France can take a seignorage of 8 per cent upon the coinage. Nobody would bring bullion to the mint, it would be all sent to Holland or England" (p. 286 in *Rae's Life of A. Smith*).

In tracing the development of wealth, Hume considers that the advance of agriculture promotes manufactures, by giving rise to superfluous hands. These must either find employment in manufactures or become soldiers. Sometimes the interests of the sovereign and the people are at issue, as to which the choice shall be. As a rule, however, even in the interests of the sovereign, it is well to have a manufacturing class, because they form a reserve fund upon which the state can draw in time of need. "Everything in the world is purchased by labour, and our passions are the only causes of labour." Hence, even avarice and luxury become spurs to industry. "The camp is loaded with a superfluous retinue, but the provisions flow in proportionally larger." MANDEVILLE (*q.v.*) is wrong, and vice, in itself, is never advantageous, but two opposite vices may be more advantageous than one alone. "By banishing vicious luxury, without curing sloth or indifference to others, you only diminish industry." Foreign commerce is justified upon similar grounds. "It increases the stock of labour." Imports furnish materials for new manufactures, and exports produce labour in commodities which could not be consumed at home. The acute remark is appended that foreign trade generally precedes refinement in the home manufactures, and gives birth to domestic luxury. In a noteworthy digression, Hume, following LOCKE, asserts strongly the claims of the labouring classes. A too great disproportion of property is a source of weakness. "Every person, if possible, ought to enjoy the fruits of his labour in a full possession of all the necessities and many of the conveniences of life." The power of the state is thereby augmented, in its capacity to bear taxation.

In the *Essay on Money*, the error of those who held that money was more than a commodity is clearly demonstrated, but it is not clear how far Hume always kept himself free from the opposite error of holding it to be less. Money "is none of the wheels of trade; it is the oil which renders the motion of the wheels more smooth and easy." Men and commodities are the real strength of a community. In a single isolated country, the quantity of money can make no difference, while, in international commerce, the dearness of everything, including labour, which prevails in rich countries, ultimately enables poorer countries to undersell them in neutral markets. "It seems a maxim almost self-evident that the prices of everything depend on the proportion between commodities and money, and that any considerable alteration of either has the same effect, either heightening or lowering the price. Increase the commodities, they become cheaper; increase the money, they become dearer; as, on the other hand, a diminution of the former and that of the latter have contrary tendencies." Hence industrial preponderance is continually shifting. Modern improvements in transportation and labour-saving appliances may successfully check this tendency. But if a mere increase in the amount of money is not, in itself, a benefit, how comes it that it does, in fact, seem to promote prosperity? Hume's answer to this question is one of his most important contributions to economics. An increase in the amount of the precious metals is not followed at once by an advance in prices. "Though the high price of commodities be a necessary consequence of the increase of gold and silver, yet it follows not immediately upon that increase." It is only in the interval "between the acquisition of money and the rise of prices that the increasing quantity of gold and silver is favourable to industry" (*v. Money in its relations to Trade and Industry*, by F. A. Walker, London, 1880, pp. 84-87). Hume clearly points out that only circulating money and circulating commodities operate on prices. He does not, however, perhaps fully take into account the rapidity of circulation. Every absolute or relative increase in the amount of money need not produce a corresponding diminution in its value; the number of trade transactions may increase proportionally. In opposition to Locke and PERRY (*q.v.*), Hume demonstrates that low interest does not arise from plenty of money. High interest arises from a great demand for borrowing; little riches to supply that demand, and great profits from commerce. Low interest arises from the opposite circumstances. The class of landed proprietors is generally spendthrift, and, when it predominates, borrowers will be numerous, and the rate of interest high. Merchants on the other hand are generally

frugal, and an increase of manufactures gives rise to a new lending class, and thereby lowers interest. Low interest and low profits mutually forward each other. It is idle to ask which is cause and which is effect; they both arise from an extensive commerce. "Interest is the barometer of the state, and its lowness an almost infallible sign of prosperity." Roscher finds in the essay on interest the first clear germ of the important doctrine that "a change in the channels of international trade, which in most countries is the only source of gold and silver, may make the price of the precious metals dearer in one place and cheaper in another, even while the conditions of the production of the mines remain entirely unaltered."

The essays of the *Balance and Jealousy of Trade* contain a clear statement of sound doctrine. "The more is exported of any commodity, the more will be raised at home, of which they themselves will always have the first offer." "I should as soon dread that all our springs and rivers should be exhausted, as that money should abandon a kingdom where there are people and industry." With his habitual caution, however, Hume safeguards himself. He approves of duties on foreign goods, which tend to encourage home manufactures. Still, the only commercial nations which need dread the improvements of their neighbours are such as flourish only by being brokers or carriers. With regard to taxes, the best are such as are levied upon consumption, especially those of luxuries, because these taxes are least felt. Hume denies that all taxes fall ultimately upon the land (see *PHYSIOCRATS*). If the artisan be taxed, he may be able to pay, by superior industry or by frugality, without raising the price of his labour. Before the spectacle of national indebtedness, Hume's usual optimism fails him. "Why should the case be so different between the public and an individual?" National debts enrich the capital at the expense of the provinces, put the country at the mercy of foreigners, and encourage an idle class of fund-holders. Public stocks are a kind of paper credit, and have all its disadvantages. The taxes, which the interest necessitates, either raise wages, or inflict hardships on the people. "Either the nation must destroy public credit, or public credit will destroy the nation . . . When I see princes and states fighting and quarrelling amidst their debts, funds, and public mortgages, it always brings to my mind a match of cudgel-playing fought in a china-shop." Repudiation would, however, soon be followed by a revival of credit. "Mankind are in all ages caught by the same baits: the same tricks . . . still trepan them. The heights of popularity and patriotism are still the beaten road to power and tyranny,

flattery to treachery, standing armies to arbitrary government, and the glory of God to the temporal interest of the clergy."

[The best edition of Hume's works is in four volumes, edited by T. H. Green and T. H. Grose, 1875, 8vo. The economic essays are in vol. i. of the two volumes of *Essays, Moral, Political, and Literary*.—J. Hill Burton, *Life and Correspondence*, 2 vols., Edinburgh, 1846, 8vo; and *Letters of Eminent Persons to D. Hume*, Edinburgh, 1849, 8vo, throw light on the economic side of Hume.—The chapter on Hume in J. Bonar's *Philosophy and Political Economy*, London, 1893, 8vo, brings out Hume's position in the history of economics.—Allusions to the essays will be found *passim* in the notes to Roscher's *Principles of Political Economy*, translated from the thirteenth edition by J. Lalor, New York, 1878, 8vo.—Walker's *Money*, New York, 1877, 8vo.—and Gibbs' *Colloquy on the Currency* are among the books which discuss his views on money and interest, London, 8vo.—John Rae, *Life of Adam Smith*, London, 1895, 8vo.—Prof. T. H. Huxley, *Hume*, in John Morley's *Men of Letters* series.] H. E. E.

HUME, JAMES DEACON (1774-1842), entered the custom house at the age of sixteen. In 1822 he undertook the consolidation of the laws of the customs, which he completed in 1825. In his introduction, Hume states that he was "selected for this service for his supposed practical knowledge of the business of the department, and not for legal knowledge." This consolidation was termed by Huskisson "the perfection of codification." In 1815, according to the Custom Commissioners' Report of 1857, there were 1100 Custom Acts in force. All these, with the additions between 1815 and 1824, were repealed in 1825, by an act in which 443 statutes were enumerated, and the rest repealed by a general definition; thus sweeping away all the laws of the customs which had accumulated during the space of 550 years, and substituting eleven short plain acts contained in a volume of 411 pages. In 1823 Hume had been appointed controller of the customs, and in 1828 he was promoted to be secretary at the board of trade, a position he held till his resignation in 1840. In 1833 he contributed, under the initials H. B. T., some letters to the *Morning Chronicle*, "on the Corn Laws and on the Rights of the Working Classes," which were republished by him in the following year. He contributed articles in 1836 "on the Corn Laws" and "on the Timber Duties" to the *British and Foreign Quarterly Review*. He gave valuable evidence before the Committee of the House of Commons appointed in 1840 to inquire into the duties levied upon imports. In his evidence he stated that he disliked all treaties, except upon navigation. "I would take what I wanted and leave them (foreign nations) to find the value of our custom." He died in 1842, so that he did not

live to see the final triumph of free trade. But there can be no question that, by the influence he exercised upon the mind and policy of Sir R. Peel, he did much to bring about that triumph. In the words of Sir James Graham, "the history of the board of trade from the time of Mr. Huskisson to the close of Mr. Deacon Hume's services at that board may be considered as the history of Mr. Deacon Hume himself."

Hume published *The Laws of the Customs*, 6 Geo. IV. c. 106-116, with notes, 1825-1832, 6 pts., 8vo.—*The Laws of the Customs*, 3 & 4 Will. IV., 50-60, with notes, 1833-36, 3 pts., 8vo.

[*Life of J. Deacon Hume*, by C. Badham, *Custom Commissioners' Report*, 1857, London, 1859, 8vo.] H. E. E.

M'Culloch, in his *Literature of Political Economy*, speaks somewhat slightly of Deacon Hume's letters under the signature H. B. T., to the *Morning Chronicle*, which in his view "involve some very questionable and, as we think, wholly untenable positions," p. 80. Tooke, however, in *The History of Prices*, vol. iv. p. 106, speaks in a very different tone of these letters, and shows how accurate an observer Hume was "of events connected with the commerce of the country."

HUME, JOSEPH (1777-1855), was the son of a Montrose ship-master. He studied medicine, became a member of the College of Surgeons of Edinburgh, and in 1797 was appointed assistant-surgeon in the marine service of the East India Company. Later he was transferred to the land service of the company. Applying himself diligently to the study of the native languages and religions, he mastered Hindustani and Persian, and was employed by the administration in political duties. He filled in succession responsible posts in the offices of paymaster and postmaster of the forces, in the prize agencies, and in the commissariat. In 1807 he retired from the service, and returned to England with a fortune of £40,000. Hume now devoted himself to a study of the history and resources of Great Britain, and after visiting the whole of the agricultural and manufacturing centres of the United Kingdom, he spent some time on the continent, increasing his stores of political information.

In 1812 Hume entered parliament for Weymouth, having purchased two elections to the seat. He was at this time, and for a brief period subsequently, a tory. He opposed the Framework Knitters' Bill in the interest of the manufacturers. Upon the dissolution, in the autumn of 1812, the owners of the borough of Weymouth refused to re-elect him, when he took legal proceedings, and recovered a portion of the money he had deposited. While out of parliament he took a prominent part on the central committee of the Lancastrian schools, and closely studied the condition of the working classes, advocating the establishment of savings

banks. He essayed in vain to get elected upon the East India Board, but he was active in exposing abuses, and when the charter of 1793 expired he advocated freedom of trade with India, pointing out that it must result in an enormous expansion of commerce with the East. In 1818 Hume was elected as a liberal for the Border Burghs, and from this period until his death—with the exception of a brief interregnum—he held a seat in parliament, representing in succession the Border Burghs, Aberdeen, Middlesex, Kilkenny, and Montrose. During the whole of his career in the House of Commons he unflinchingly advocated financial and general reforms. He first drew attention to the enormously disproportionate cost of collecting the revenue, and compelled the appointment of a select committee, which reported in his favour. He opposed the scheme for the reduction of the pension charges, and in 1824 obtained a select committee on the combination acts. During the reform debates of 1831 he advocated the extension of representation to the colonies, and three years later he moved for the repeal of the corn laws. In 1835-36 he severely attacked the Orange Society, which was credited with a design to place the Duke of Cumberland on the throne after the death of William IV.

Hume was the sleepless watch-dog of finance, and mainly owing to his efforts the advanced radical party became known as the party of retrenchment. Every item in the returns of the public expenditure was subjected to his severe scrutiny—a task over which he expended much toil and money. He procured the abolition of the sinking fund, and it was he who re-introduced the fourpenny silver coin (see GROAT), which, however, has once more disappeared. He secured the repeal of the combination laws, as well as of those prohibiting the emigration of workmen and the exportation of machinery. He was an advocate of Catholic emancipation, of parliamentary reform, and of the repeal of the test and corporation acts. Hume was one of the trustees of the loan raised for the Greek insurgents, and was charged with jobbery in connection with it; but all that he did was to secure an advantageous liquidation of his holding when the loan was at a discount. He served on more committees of the House of Commons dealing with finance and the public service than any other member. Hume died, 20th February 1855; and Lord Palmerston, in alluding to the event in the House of Commons, observed that it was said of an eminent statesman (Burke) that he “gave up to party what was meant for mankind,” whereas “the reverse might be said of Hume, who devoted himself first to his country and then to the general interests of mankind at large.” A scholarship in political economy was founded in his memory at University College, London.

[Harris's *Radical Party in Parliament*.—Anderson's *Scottish Nation*.—*Dictionary of National Biography*, art. “Joseph Hume.”—*Annual Register*, 1855.—*Gentleman's Magazine*, 1855.—Harriet Martineau's *History of the Thirty Years' Peace*.—Hansard's *Parliamentary Debates*.]
G. B. S.

HUNDRED. The origin of the administrative division called a hundred in England has given rise to endless discussion among historians. There is no documentary mention of it until the ordinance of Edgar in the 10th century, and hence some have considered it a creation of that king. A tradition, recorded by William of Malmesbury, attributes the formation of hundreds to Alfred. On the other hand, the evidence of Tacitus and the analogy of all other German peoples would lead us to expect the existence of an administrative unit larger than the township and smaller than the tribe or kingdom. Moreover, the ordinance of Edgar does not read at all like the starting of an innovation, but only as regulating the use of an existing institution. Probably the best conclusion is that the English brought over with them the organisation of the hundred, but this name was by no means in universal use till the 10th century. In the western conquests, made after Angles and Saxons became Christian, the organisation may not have been introduced, while it may have fallen into decay in the north and midlands during the Danish wars. The effect of Edgar's ordinance would thus be to revive the hundred system where it had fallen into disuse, to extend it to districts where it had never been introduced, and to definitely fix its uses and arrangements.

The origin of the name hundred is even more obscure than that of the district to which it has been applied. It must at some time have had a numerical significance, such as the settlement of a hundred families or the district which sent a hundred warriors to the host, but it is quite impossible to trace such a meaning in England. The court of the hundred, which met every four weeks, consisted of the freeholders of the district with the parish priests and the reeve and four men from each township. It was the primary court of criminal jurisdiction in Anglo-Saxon times. The hundred was also the basis of military assessment and of the system of mutual responsibility, which in those days served instead of police. The organisation of the hundred was carefully preserved by the Norman kings as a counterpoise to the growth of territorial jurisdiction in the hands of the great barons. But it steadily decayed in the 13th and 14th centuries, and its place was supplied by the rise of the justices of the peace.

[*Essays in Anglo-Saxon Law* (Boston, 1876).—Stubbs, *Select Charters*, pp. 68-70.—Stubbs, *Constitutional History*, i. pp. 96-99.]
R. L.

The geographical division of the counties into hundreds continued, however, and for some purposes is still of practical importance. Thus in several counties the liability of the hundred for the repair of bridges continues, and the county councils have power, under § 3 of the Local Government Act of 1888, to assess and levy hundred rates. Up to the passing of the Riot (Damages) Act, 1886, the inhabitants of a hundred were, under a statute of George IV., liable in certain cases to pay compensation for damage done to property within the area of such hundred in the course of any riotous proceedings (for a modern instance of a claim made under the provisions of the statute in question, see *Drake v. Tootitt*, 7 Q.B.D. 201 [1881]).

The organisation of the rural police, until a comparatively recent period, also conformed to the division of counties into hundreds. The "high constables," whose office was abolished in 1867, had jurisdiction over their respective hundreds in the same manner as the parish constables over their respective parishes, and the division of counties into hundreds had to be considered in the arrangement of petty sessional divisions (see 10 Geo. IV. c. 46).

In more recent times the areas of the poor-law unions have been found more convenient intermediate units for the purposes of local government, and the rural districts created by the Public Health Act 1875 (see § 9)—the importance of which has been considerably increased by the Local Government Act 1894—are generally coterminous with these areas.

E. S.

HUNDRED ROLLS. In 1274, soon after Edward I.'s return from the Holy Land, special commissioners were appointed to summon juries in the different districts throughout the country in order to inquire into the king's rights, royalties, and prerogatives, and into all frauds and abuses connected therewith, by which the crown suffered loss of revenue. This step had become necessary, for, owing to the encroachments of nobility and clergy during the troubles of the preceding reign, the resources of the crown had been seriously impaired. The results of the inquisitions held on this occasion make up the *Hundred Rolls*. These, therefore, contain particulars of (1) all demesne lands, and of manors which had been alienated from the crown; (2) tenants in capite and in demesne; (3) losses to the crown through sub-infeudations; (4) alienations to the church under pretext of *FRANKALMOIGN*; (5) wardships and other feudal rights withheld from the crown; (6) the crown's interest in fee farms, hundreds, wapentakes, and tythings; (7) *jura regalia*, such as wreck, free-chase, etc.; (8) illegal and excessive tolls on fairs, and for murage, pontage, etc.; (9) exactions and oppressions by crown officers; and (10) unlawful exportations of wool,—the whole forming one

of the most valuable records ever compiled. The Hundred Rolls have been printed by the record commissioners in two large folio volumes with an introduction by W. Illingworth.

[Cunningham, *Growth of English Industry and Commerce*, bk. ii. ch. iii., Cambridge, 1890.]

A. E. S.

HUSBAND (AS TO WIFE'S PROPERTY). Husbands who were married before 1883 to wives possessed of property not settled upon them for their separate use, became entitled to extensive rights in respect of such property. All personal property actually in the wife's possession at the time of her marriage became the husband's property; debts owing to the wife became payable to the husband, if recovered within the wife's lifetime; if not recovered during the wife's lifetime the husband became entitled to them as administrator of his deceased wife's personal property. In addition to this, if any children were born during the marriage the husband acquired an indefeasible life interest in his wife's real property (he acquired "an estate by the curtesy"). All this has been materially altered by the Married Women's Property Act of 1882. Women who have married since the 1st January 1883 hold all their property as separate property, and the same rule is applied to property acquired after that date by women married before the commencement of the "Married Women's Property Act." A married woman may also dispose of her separate property by will without her husband's concurrence, and the only rights which remain to the husband are the absolute right to the wife's personal estate in case she dies intestate, and a life interest in her real estate in the same event, if there was a child of the marriage.

E. S.

HUSKISSON, WILLIAM (1770-1830), the son of William Huskisson and Elizabeth (*née* Rotton), and educated at schools at Brewood, Albrighton, and Appleby in Leicestershire. In 1783 he was taken to Paris by his uncle Dr. Gem, where he remained for a long time, becoming private secretary to Lord Gower, the English minister, in 1790. On his recall Huskisson returned to England, and in 1793 was appointed to consider the position of the numerous French refugees with regard to the requirements of the Alien Act. In 1795 he became under-secretary for war and colonies, and in the following year entered the House of Commons as member for Morpeth. On Pitt's resignation in 1801 he withdrew from office, only retaining his under-secretaryship for a few weeks after that minister's retirement for the convenience of the incoming secretary. In 1804 he was appointed secretary of the treasury, passed into opposition in 1806, and resumed the position of secretary of the treasury in 1807. In 1810 he resigned with Canning; in 1814 was appointed chief commissioner of

woods and forests, a position which he quitted in 1823 to become president of the board of trade. Having sat in succession for several constituencies, he refrained from seeking re-election at Chichester after his new appointment in order to become one of the representatives of Liverpool. The remaining facts of his official life are few. In 1827 he was appointed colonial secretary, an office resigned in 1828. His death was caused by an accident during the opening of the Liverpool and Manchester railway in 1830.

Throughout his career Huskisson was remarkable for his firm adherence to the principles of sound economic reform. He was a member of the Bullion Committee (see BULLION COMMITTEE, REPORT OF), and in the currency discussion he took an important part in the protest made against an inflated paper currency, both then and in his writings laying down most clearly and vigorously the principles upon which a sound monetary system must be based. During his tenure of office at the board of trade he was responsible for important changes in the economic policy of the country. In the first place he modified the navigation system as affecting the colonies and foreign nations; with regard to the former, introducing changes which permitted direct trade to take place between the colonies and foreign countries in either British ships or those of the foreign nations thus concerned, but reserved the trade between the colonies and England. With regard to the foreign nations he carried a measure in 1825, which enabled the king in council "to place the shipping of any other country on an equal footing with our own, when that country was prepared to grant a similar favour in return." By this act Huskisson prepared the way for the final abolition of the Navigation Act, which, however beneficial in former years, was at the time a serious obstacle to the development of the trade of the country.

In the second place Huskisson began the policy of tariff revision and simplification which was afterwards undertaken by Peel and completed by Mr. Gladstone. This course he entered upon in 1824. His policy was twofold, the removal of the custom duties affecting raw material, and the reduction of the duties imposed on the import of foreign manufactures.

In these instances, as in the other changes of an economic character for which he was responsible—as for instance the repeal of the statutes prohibiting combination in 1825.—Huskisson displayed great moderation and foresight. The changes he made fully answered his anticipations. Too much praise, indeed, cannot be given to Huskisson for the courage he displayed in administrative economics. His knowledge of the details was wide, his grasp of principle firm; and though his speaking was

not of the order of high oratory, it was lucid and persuasive, in short of the kind most fitted to the subjects with which he had to deal.

[See especially Huskisson's *Speeches*, 3 vols.—*The Question concerning the Depreciation of our Currency stated and examined*, 1810.—A Paper on the currency 1826 in which he recommends a double standard for this country—silver as well as gold—lately reprinted by the Bimetallist League.] E. C. K. G.

HUTCHESON, ARCHIBALD (late 17th century to 1740), barrister of the Middle Temple and member for Hastings. He agitated upon the questions of the national debt and the South Sea scheme. Having spoken on the first of these subjects in the last parliament of Anne, in 1714, he laid his proposals for its discharge before George I., and in March 1716, before parliament. He suggested devoting to its payment "so much as shall be sufficient of the estates real and personal of all the inhabitants of Great Britain . . . or by raising of new sinking funds, . . . or by borrowing at lower interest."

He advocated a more frugal expenditure of the public revenue, proposed the abolition of the excise and customs duties, so as to relieve the government of the burden of their collection, and was eager for free and fair elections, frequent parliaments, and the abolition of bribery and corruption.

Hutcheson published:—*A Collection of Treatises relating to the Public Debts and Funds, etc.*; and also *A Collection . . . relating to the South Sea Stock and Scheme*, London, 1721, fol.—*An Abstract of all the Public Debts remaining due at Michaelmas, 1722, and an Estimate of the Annual Sinking Fund towards the Discharge of the same, etc.*, London, 1723, fol.—*An Abstract of an Account stated by some of the Clerks at the South Sea House, relating to the Estates of the late Directors, etc.*—*The case of Contracts for South Sea Stock in General, etc.* (By A. H.) 1720, fol.—*A Collection of Advertisements, etc.* . . . relating to the Last Elections of Westminster and Hastings. . . . London, 1722, 8vo.—*Copies of some letters . . . from Mr. Hutcheson to the late Earl of Sunderland*. T. Payne, London, 1722, 8vo.—*An Estimate of the Value of South Sea Stock*, 1720, fol.—*Some Computations and Remarks relating to the Money, Subscribers, and the Proprietors of the Public Debts, etc.*, London, 1720.—*A Speech made in the House of Commons, 25th April 1716* (by A. H.), 1716, 8vo, 2nd edit. 1722, 8vo.

A. L.

HUTCHESON, FRANCIS (1694-1746). Born in Ireland, but of Scottish descent, Hutcheson was appointed to the chair of moral philosophy in the university of Glasgow in 1727, and was thus a predecessor of Adam Smith. It is chiefly on account of the influence his writings are supposed to have had upon Smith that he is classed as an economist. He was one of the earliest propounders of what is known as the utilitarian doctrine of ethics; and his teaching

in this matter may be regarded as the foundation of the corresponding theory of economics, whose supporters included Smith, Bentham, and James Mill, and in a modified degree J. S. Mill. The following quotation from his inquiry concerning moral good and evil (§ 3) contains the kernel of this doctrine, compressed into remarkably few words. "In equal degrees of happiness expected to proceed from an action, the virtue is in proportion to the number of persons to whom the happiness shall extend." Bentham's often quoted ideal, "the greatest happiness of the greatest number," is to be found in Hutcheson. In his principal work, *A System of Moral Philosophy* (1742), there are many passages which foreshadow the theories subsequently developed by his great successor in the *Wealth of Nations*. Bk. ii. ch. vii. is a discussion on public and private property, the latter of which Hutcheson explains and defends in a manner somewhat different from that commonly employed by modern economists. He also examines the origin of capital, very much as Smith does. Chapters viii. and ix. of the same book are an expansion of the same subject; in the latter he deals with the subjects of contract. W. R. Scott, *Francis Hutcheson: his Life, Teaching, and Position in the History of Philosophy*, 1900.—See also the Introduction to Cannan's edition of Smith's *Wealth of Nations*, 1904, vol. i. pp. xxxvi. xliii. M. G. D.

HUTCHINSON, JOHN HELY (1724-1794), a well-known Irish lawyer and statesman. Upon his marriage with the niece and heiress of Richard Hutchinson, he adopted that name.

He first sat in 1759 as member for Lanesborough, but from 1761-90 for the city of Cork. To quiet his violent opposition, the government made him privy councillor, and for subsequent services he was successively appointed prime serjeant-at-law, alnager, and in 1777 chief secretary of state. In 1774 he also obtained the provostship of Trinity College. In 1785 he accepted a peerage for his wife, who accordingly became Baroness Donoughmore. His greed of money and place won him the title of "ready-money-voter," and it cannot be denied that on more than one occasion he stretched his authority and influence to further his own and family interests.

But apart from this he was an able, if an unpopular, provost, and a clever and far-sighted statesman. Where his private interests were not concerned he followed the promptings of patriotism and public spirit. He was a fearless advocate of independence, of Roman Catholic emancipation, and of free trade; and one of his last votes was in favour of parliamentary reform. Hutchinson is best known to economists as the author of *The Commercial Restraints of Ireland*, a work which originally consisted of a series of letters to the lord lieutenant, Lord Buckinghamshire. It was

published anonymously in 1779, but condemned to be burnt by the common hangman for its seditious doctrines. The advocates of free trade, however, gave it high praise.

The author is at pains to discover the causes which had ruined and were still ruining Ireland; and traces it to the selfish, and as he endeavours to show, suicidal, policy of the English parliament of 1699, which absolutely prohibited the exportation of Irish woollen manufactures. Hutchinson, very moderately, points out that, apart from its injustice, this policy was injurious to English interests; that one third of the wealth of Ireland was possessed by England, and that she would receive more than half the benefit of the woollen trade, and even at that price Ireland would obtain some prosperity.

In 1785 he repudiated the accusation of playing into the hands of the government, by his *Letter from the Secretary of State to the Mayor of Cork*, in which he put the case for the Anglo-Irish trade very plainly before his constituents.

He shows that no two countries on the globe are more necessary to the happiness and welfare of each other than these two islands, and advocates a noble equality and reciprocity of commercial tariffs.

The following is a list of his writings: *The Commercial Restraints of Ireland considered*, 1779, 1780, 8vo.—*A Letter . . . to the Mayor of Cork on the Subject of the Bill presented by Mr. Orde, on the 15th Aug. 1785, for effectuating the Intercourse and Commerce between Great Britain and Ireland on . . . Equitable Principles*, etc. Dublin, 1785, 8vo.—*Mr. Hutchinson's Letter to his Constituents at Cork*, 1786, 8vo.—*The Speech of . . . J. H. H. . . . made in the House of Commons on the 26th day of June 1793, on the Resolution . . . respecting the Regulations of the Treasury Board*, Dublin, 1793, 12mo. A. L.

HUYSERS, ARIEN (died in 1806). A Dutch merchant and clerk in the service of the (Dutch) Company of the East Indies. Besides the biography of one of its governors-general, R. de Klerk (Amsterdam, 1787), he published a description of their settlements (*Beschryving der Oost Indische Etablissemerten*), Utrecht, 1789, and reprinted in Amsterdam in 1792.

[Frederiks en Van den Branden, *Biographisch Woordenboek*, Amsterdam, 1888.] E. ca.

HYPOTHEC (Scots Law). A lien or right existing at law in some particular cases, in favour of a creditor, by way of security over property of his debtor, while that property continues to belong to the debtor and to be in his possession. Examples of this are: the landlord's hypothec for rent, over the crop and stock of his tenant in a pastoral or agricultural holding, this hypothec having now been abolished by the Hypothec Abolition Act, 1880, so far as regards land exceeding two acres in extent; his hypothec over household furniture, etc., in houses, for

the rent; the hypothec of a superior or overlord for the last or current feu-duty or annual payment to him, this hypothec being over the crop and moveable property on the land, and being preferred above the landlord's hypothec for his rent; the hypothec of seamen over the freight and the ship for their wages; that of the ship-owners against the cargo for freight; that of freighters over the ship against the shipowners for loss through mismanagement; and that of ship-repairers over the ship for cost of repairs in a foreign port. The law-agent's right of retainer of documents until paid is also called, in Scotland, his hypothec (see LIEN). A. D.

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E. A. W.

HYPOTHECATION. A general expression for all transactions by which some property is mortgaged or pledged by way of security for a debt. The expression "letter of hypothecation" is frequently used for the document by which goods, the bill of lading relating to which is attached to a bill of exchange, are mortgaged to the holder of the bill, by way of security for the acceptance or payment of the same. As such goods have sometimes to be landed or re-shipped, and during the time before warrants or new bills of lading are issued may be in the possession of the mortgager or his agent, there was a doubt whether the letter of hypothecation did not have the effect of a **BILL OF SALE** (*q.v.*) and ought to be registered accordingly, but the Bills of Sale Act 1890 has made it clear that the registration of such a document is unnecessary. E. S.

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The word hypothesis is used in science to denote any supposition put forward as a premiss from which deductions are to be drawn. Hypotheses, however, differ in their essential character according to the purposes for which they are constructed and the uses to which they are put. Most of these varieties of application are exemplified in the writings of political economists. It will be convenient to treat the various kinds of hypothesis under different heads, and to give examples under each head of the ways in which hypothesis has been applied in political economy.

(1) *The Illustrative Hypothesis*.—Hypotheses of the first kind are those used in the exposition of complex phenomena. The purpose here is primarily didactic; the writer having in view the need of familiarising students with the

conceptions appropriate to the subject. It is very usual to begin the exposition of any branch of economic study by describing phenomena of a much simpler character than the corresponding phenomena of actual economic life. Simple conditions of a definitely assigned character are laid down for illustration, without any implication that these necessarily accord with reality. Such a use of hypothesis may be called *Illustrative*. One of the best examples of such hypothesis is that used by Professor Nicholson in *Money*, ch. v. § 3. He begins his exposition of general prices by assuming an artificially simplified case in which it is supposed that money consists of counters only of use to effect exchanges, that no exchanges are made without the passing of money from hand to hand at every transaction, and further, that there is a definitely assigned distribution of commodities and of money among a given number of traders. Hypotheses of a similarly illustrative character are used by Mill and Bastable in their expositions of the theory of international values. They begin by assuming that there are but two nations in existence, that these nations trade only in two commodities, and that there are no expenses of carriage, etc., between the nations, or other items of mutual indebtedness, besides exports and imports. We may add that a mathematical treatment of the pure theory of exchange or of distribution necessarily employs simple hypotheses for illustration or exposition, as for example in the works of Cournot and Jevons. Such instances are too numerous to be recounted. Simplifications of this kind, used merely for illustration, and not supposed, at least in their initial form, to accord completely with facts, are necessary for the rigorous exposition of complex phenomena. Sometimes indeed a hypothesis is propounded which does not profess to answer to any possible or probable state of affairs; as, for example, when an investigation is made of the consequences that would follow from supposing that the amount of coin in circulation is suddenly doubled or halved, or that all the fixed capital of a country is suddenly annihilated. The uses of such hypotheses and the limitations to which they are subject are very instructively treated by Dr. Venn, *Empirical Logic*, ch. xvi. Hypotheses of the illustrative type tend to pass over into hypotheses of a somewhat different kind, to which we may refer under our second head.

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of conditions, we introduce step by step further conditions till it is believed that all the essential circumstances of the case are included. Nevertheless the point of view of the expository hypothesis is essentially different from that of the hypothesis now to be considered. The propounder of the hypothesis now adopts the position that it expresses a true tendency; that even if the conclusions derived from it do not appear to accord with observation, yet this is only because counteracting agencies have concealed its operation. We are supposed to be dealing, not with fictions, but with abstractions. The use of hypotheses of this kind has been formally justified by Mill, Cairnes, and Bagehot. Undoubtedly the method of hypothesis in this sense is the most fruitful and potent instrument in the hands of the deductive economist. In almost all cases, the risk of error is eliminated if care is taken to express explicitly the precise assumptions employed. In this respect the use of a mathematico-analytic method has a very marked advantage over arithmetical or even diagrammatic expositions; for in the former every assumption must be explicitly formulated, while in the latter we are liable to introduce unnoticed relations between the numbers or points chosen for illustration. An example of errors arising from this source is to be found in the treatment by Ricardo and Mill of the effect on rent of agricultural improvements (Ricardo, *Principles*, ch. ii. § 31; Mill, *Political Economy*, bk. iv. ch. iii. § 4). Hypotheses which profess to represent actually operative tendencies, and are therefore intended to yield results true approximately or in the long run, are often adopted more or less unconsciously. It is in this unconscious employment that their main danger lies. For in such cases the writers have really believed that they were taking into consideration all the essential circumstances of the case, and that the conclusions deduced could be applied in practice to real concrete phenomena. They have often passed unawares from the standpoint of exposition to that of practical application. Hence the use of hypotheses has been sometimes too vehemently attacked by opponents of the deductive school. We may give a few examples of cases in which assumptions have been made more or less consciously and applied perhaps without sufficient qualification to concrete economic facts. Ricardo has been charged with assuming in his theory of value a fixed standard of comfort of the labouring population, or at least a standard determined independently of the play of ordinary economic forces. Again, the same writer and some of his followers have tacitly or explicitly assumed perfect *mobility* of capital and labour in their treatment of distribution and cost of production in domestic trade; while, as regards foreign trade, their theory of international values has been based

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guesses afterwards found not to accord with facts. Indeed the tentative hypothesis has rather a psychological than a logical interest, as indicating the mental process that must be gone through by an individual whose aim is the discovery of truth and the enlargement of knowledge and insight. Nevertheless, it will not be irrelevant to remark that workers in the field of statistics must have often tentatively brought into comparison two sets of phenomena, such as variations in the price of corn and in the marriage rate, with the view of examining whether the one set of changes can be so harmonised with the other as to suggest causal connection. A very similar investigation is made by Jevons (*Theory of Political Economy*, pp. 167-172), where he adopts a conjectural formula for expressing the relations between the supply and price of wheat in accordance with the estimates known as Gregory King's. This formula has since been amended by Mr. Wicksteed in the *Quarterly Journal of Economics*, April 1889.

(4) *The Explanatory Hypothesis*.—A hypothesis which has been put forward at first tentatively, with a view to future verification or refutation, comes after a time to be adopted as an explanatory theory when it has received some degree of confirmation. Such a theory is spoken of as a hypothesis, because it is not affirmed categorically, but is regarded as a premiss from which conclusions can be deduced which coincide with empirically observed facts or uniformities. The explanatory hypothesis differs from the tentative hypothesis mainly in respect to the point of view from which they are regarded. The latter indicates a stage in the process of *discovery*, the former is concerned with the question of *proof*. For the explanatory hypothesis is a theory regarded as deriving some degree of probability from its accordance with observations of fact. It differs from a law guaranteed by stricter induction in being avowedly subject to more or less doubt. A hypothesis used in explanations falls into one or other of two classes. It may be that the facts put forward as explanatory are not themselves in dispute, but only their causal connection with the phenomena to be explained. Or it may be that the facts put forward as explanatory are themselves open to question, though it is not denied that if true they would be adequate to explain the effect observed. The following are a few examples of hypothesis used in explanation of economic facts. Malthus, observing that the two countries Norway and Sweden closely resembled one another in their general economic conditions, and yet that the average proportional mortality was considerably higher in Sweden than in Norway, inferred that the difference was to be explained by the superior force in Norway of preventive checks to the increase of population due to certain

governmental regulations and national sentiment and customs. Similarly, the difference in the prosperity of two similarly situated countries has been often hypothetically explained as the effect of the maintenance of a policy of free trade or of protection as the case may be. Or again, the fall in the gold-value of silver since 1874 has been explained as effect of the German demonetisation of silver; and the present depression in trade as effect of a scarcity of gold. In Adam Smith many hypothetical explanations of observed facts are to be found. He, for example, suggested that the impossibility of separating the different branches of labour employed in agriculture is the probable reason why improvements in agriculture have not always kept pace with improvements in manufacture. He gave numerous hypothetical explanations of variations in profits, in wages, in riches, etc., gathered from observations extending over large ranges of time and place.

(5) *The Working Hypothesis*.—The expression working hypothesis is in common use, but it seems to bear no universally recognised meaning beyond what is implied by the word hypothesis alone. The word *working* implies that the value attributed to such a hypothesis is due to the expectation that true results can be deduced from it, though in itself it has no claims to be regarded as true or even probable. It is adopted, at a particular stage of scientific investigation, to assist the mind in realising a mass of complex phenomena. In the theory of electricity, the hypothesis of one and that of two fluids are examples of working hypotheses. Similarly, the *social contract* of HOBBS and ROUSSEAU may in the same sense be regarded as a convenient fiction which enables us to understand some of the aspects of social evolution. The working hypothesis, as thus defined, is midway between the illustrative and the explanatory hypothesis. It is not merely illustrative, since it leads to results that agree with experience; but it can hardly be called explanatory, since its use does not depend on any belief in its truth or even its probability.

(6) *Relations between the different types of Hypothesis*.—Though we have hitherto been concerned to bring out the distinctions between different kinds of hypothesis, yet it is equally important to point out the mutual connections between them and to show how they are to be correlated in economic science. The expository hypothesis is derived primarily from generally accepted and comparatively simple laws of nature. It is of value in proportion to the extent to which its results are confirmed by facts directly observed and by uniformities directly generalised from experience. Conversely, the explanatory hypothesis is derived primarily from data of observation; but it is of value in proportion to the degree with which it is confirmed by deductive reasoning from

acknowledged laws of human, social, or physical nature. A complete method, therefore, requires that the processes of induction and deduction should supplement one another, each serving as verification of what is arbitrary or uncertain in the other. The hypothesis used in deduction keeps as closely as possible to the simple laws of human nature known to be actually operative; but, since actual phenomena are due to the composition of many concurrent tendencies, we can never be sure that all these tendencies have been taken into account, or that their comparative force has been correctly estimated. Similarly the hypothesis used in induction keeps as closely as possible to the actual facts of economic life ascertained by direct observation; but, since

no mere generalisation is acceptable unless its dependence on fundamental principles of human nature has been exhibited, we must verify any inductively suggested explanation by showing how it may be derived from such fundamental principles. The consilience of deductive and inductive inferences is thus the ultimate criterion by which the value of every sort of hypothesis is to be measured.

[Mill, *Unsettled Questions of Political Economy*, Essay v.—Cairnes, *Logical Method of Political Economy*, *passim*.—Bagehot, *Economic Studies*, Essays i. ii.—Keynes, *Scope and Method of Political Economy*, *passim*, see also DEDUCTIVE METHOD; EXAMPLES; INDUCTIVE METHOD.]

W. E. J.

ICARIA. See CABET, ÉTIENNE; COMMUNISM. IDDESLEIGH, THE EARL OF (1818-1887), better known as Sir Stafford Northcote, came of an old Devonshire family, and was educated at Eton and Oxford. He was intended for the bar, and in 1841 became private secretary to Mr. Gladstone, whose liberal views on finance and political economy he imbibed. His general political opinions, however, were conservative. In 1845 he accepted a permanent post in the board of trade, and two years later he became legal secretary to the board. During the debates on the navigation laws he published an able pamphlet on the subject which convinced the Duke of Wellington of the necessity and expediency of removing this vestige of the old protective system. In 1851 Mr. Northcote succeeded his grandfather in the baronetcy, and in the following year he rendered signal assistance to the Prince Consort as one of the secretaries of the great exhibition. His labours at this time were so exhausting that his health was seriously impaired, and the first symptoms of that cardiac weakness which afterwards proved fatal were developed. Rest restored his health considerably, and his joint labours with Sir Charles E. Trevelyan in connection with the report on the civil establishments of the crown (1853-54) led eventually to the establishment of the civil service commission, and the throwing open of the civil service generally to public competition.

Sir Stafford Northcote first entered the House of Commons in 1855 as conservative member for Dudley; he sat for Stamford from 1858 to 1866; and for North Devon from 1866 until 1885, when he was raised to the peerage as Earl of Idesleigh. In 1858 he was appointed financial secretary to the treasury, and when Lord Derby's third administration was formed in 1866, he became president of the board of trade, an office which he exchanged in the following year for that of secretary of state for

India. In 1871 he was nominated by Mr. Gladstone one of the special commissioners for the negotiation of the treaty of Washington, which had for its principal object the final settlement of the Alabama claims. The treaty was successfully concluded, and the long and bitter controversy between Great Britain and the United States finally closed. In 1874 Sir Stafford Northcote was appointed chancellor of the exchequer, an office for which he was eminently fitted. He had already published his important work *Twenty Years of Financial Policy: a Summary of the chief financial measures passed between 1842 and 1861; with a Table of Budgets*. In this work—which is one of the best efforts of recent times to record the effects of taxation, including local taxes—the author declared himself a disciple of the financial school of Peel and Gladstone. As chancellor of the exchequer he upheld the doctrines of free trade; and his financial policy included the final extinction of the sugar duties, and a slight increase in the tax on tobacco; the temporary reduction of the income tax to twopence in the pound, the lowest point it had reached from the first imposition of the tax; and the establishment and maintenance of an effective sinking fund, maintained generally by his successors. While out of office, Sir Stafford Northcote acted as chairman of an important parliamentary committee on the income tax, which his report contributed largely to sustain against the attacks of its enemies. From 1876 to 1880 he was leader of the House of Commons, in succession to Lord Beaconsfield. Besides being called upon to deal with parliamentary obstruction as a system, he had to grapple with many critical events, including the Russo-Turkish war, the Berlin treaty, the Zulu war, the Afghan war, etc. From 1880 until 1885 he led the conservative opposition, but a more robust leadership was desired in certain quarters,

and he was ultimately elevated to the House of Lords. He became first lord of the treasury in Lord Salisbury's first government, and secretary of state for foreign affairs in the second Salisbury administration; and was chairman of the Royal Commission on the Depression of Trade and Industry (1885-1886). The principles of Lord Iddesleigh's financial policy were thus defined by himself in a letter to Sir Reginald Welby (1875):—"1. Prudent, but not deliberately *under* estimates. 2. The habitual retention of a substantial surplus. 3. The retention of the income-tax at a low fixed rate, not to be disturbed for anything short of a national emergency. 4. The appropriation of a fixed annual sum to the charge for debt. 5. The avoidance of new taxes. 6. As a corollary, the toleration of old ones. Parliament and the country ought really to make up their minds to deal frankly and courageously with these matters, to eschew sensationalism, and to act on steady principles."

[*Twenty Years of Financial Policy* (1842-1861), by Sir Stafford Northcote, 1862.—*The Times*, Jan. 13, 1887.—*Life, Letters, and Diaries of Sir Stafford Northcote, first Earl of Iddesleigh*, by Andrew Lang, 2 vols., 1890.] G. B. S.

IDEAL, THE ECONOMIC. However much an economist may protest that political economy is a science, not an art, and that it is no business of his to tell people what they ought to do, he can scarcely help assuming that both they and he have some ideal towards the attainment of which a knowledge of political economy is expected to assist. In English political economy this ideal has usually been considered to be simply the greatest possible creation of wealth. Whether this is a satisfactory ideal or not depends entirely on the way the formula is interpreted. To make it satisfactory:

(1) "Wealth" must mean average or *per capita* wealth. If it be taken to mean simply aggregate wealth without any regard to the number of persons who have to share that aggregate, this would make the ideal of economic progress "a humanant-hill" (Leroy-Beaulieu, *Répartition des richesses*, p. 126). We no longer believe, with Paley, that "in comparing adjoining periods in the same country, the collective happiness will be nearly in the exact proportion of the numbers, that is, twice the number of inhabitants will produce double the quantity of happiness" (*Moral Philosophy*, bk. vi. ch. xi.). We speak of countries as rich or poor according to the wealth enjoyed by each inhabitant, not according to the wealth of all inhabitants taken collectively.

(2) The creation or "production" of wealth must not be understood in such a way that it is merely equivalent to the accumulation of instruments of production and means of enjoyment. It must mean the creation of income, not the

creation of capital. Accumulation is only useful in so far as it increases consumable income. Economists of the school of which M'Culloch was the chief representative were apt to regard the mere heaping up of goods as an end, and men only as the instruments employed in effecting this purpose.

(3) "Wealth" must be taken in its original sense, in which it means material welfare (cp. *Book of Common Prayer*, Prayer for the Queen's Majesty), not in the sense which many definitions have endeavoured to affix to it, of things possessing exchange value. It is a state or condition of human beings, not a number of objects or even objects and services. If wealth were taken merely as things possessing exchange value, and were measured by exchange value, the ideal of the greatest possible creation of wealth would be an extremely unsatisfactory one for two reasons. (a) It would be equally nearly approached whatever the quantity of painful labour expended in producing the wealth; two communities each with an income of £40 per head would have to be considered as equally near the ideal state even if the one had to work twice as hard as the other to procure that income. (b) It would be equally nearly approached however the wealth was distributed; two communities with equal incomes per head would have to be considered as equally near the ideal state, even if in the one the whole income was distributed without great inequalities, while in the other three-fourths of the whole went to one man. E. C.

IDEALIST. Like most words which are constantly employed to express praise or blame, the word idealist may be said to have lost all definite meaning. If we are to speak with philosophical accuracy, all changes, great or small, good or bad, which are effected by human will, are due to idealism. They are due to the faculty which enables man to conceive as possible and desirable a state of things different from that which actually exists. In this sense everybody is an idealist. But in practice it is convenient to reserve that appellation for persons who possess an imaginative faculty beyond the common, especially for those who conceive of society and life as dominated by some one principle which in the actual world can never find perfectly free play. Men of this type are undoubtedly the most powerful impellers, although not the most skilful executants of moral, political, and economical changes. Their idealism may take the most varied and contradictory shapes, and may be wholesome or pernicious. The believers in absolutely free competition, the believers in all-pervading state regulation, the believers in universal suffrage, and the believers in philosophical despotism, are alike idealists, although they contradict and vilify one another. The value of idealism, however, will depend on the intellectual and

moral endowment of the idealist, and especially upon his power of comprehending the actual world which he wishes to reform. F. C. M.

IDEAL MONEY is a term applied to certain species of currency which do not consist of a material thing such as coin, or notes convertible into such things. The principal species of ideal money are—I. Money of Account, and II. Inconvertible Currency.

I. (1) The simplest kind of money of account is that which was employed by the older banks, such as those of Venice and Amsterdam (see BANKS, EARLY EUROPEAN), where the unit was in effect a certain quantity of a standard precious metal. Thus at Venice the ducat banco was equal to 1·2 the standard ducat of the currency. So in the monetary system which was introduced into India on the advice of Sir James Steuart, "an ideal coin was invented by which all rupees might be valued" (Sir W. Hunter, *Rural Bengal*, quoted by Prof. Walker, *Money*, *sub voce* "Ideal Money," p. 594). Since the unit represents a definite quantity of precious metal, "a money of account of such a character is not properly an ideal money" (Walker, p. 295).

(2) Yet the term is applied not inaptly by Sir James Steuart to a certain money of account proposed by him, of which the unit corresponds to a definite quantity not of one but of two precious metals (*Political Economy*, bk. iii. ch. i.; and ch. xv.—an obscure passage, as to the interpretation of which see Lauderdale, *Depreciation proved*, p. 70 et seq.).

(3) A still more "ideal" money of account would be one referring not to two commodities only but to many, a tabular standard based on an Index Number (see INDEX NUMBERS). As explained in the article on that subject, the unit of such a currency might ideally be conceived as a certain quantity either of utility or of labour.

II. Inconvertible paper-money is in one sense less "ideal" than money of account, in that it consists of a material substance. But in another sense it is less real, since its value, depending on the quantity of the paper-money and the demand for it, does not conform directly to that of objects having INTRINSIC VALUE (*q.v.*) such as the precious metals or commodities in general. The quantity of an inconvertible currency may indeed be regulated so as to be brought into conformity with such standards; either with the value of bullion as contemplated by the older economists (*e.g.* Mill, *Pol. Econ.*, bk. iii. "On Inconvertible Currency"), or with the index number of recent theory. Some hint of the latter plan may perhaps be gathered from the writers who, during the bank restriction, advocated an "abstract currency," or "ideal money," . . . "not formed of substantial and therefore variable materials" (Glocester WILSON, and Perceval ELIOT, quoted by Prof. Walker in *Money*). Perhaps they did not

deserve the unbounded contempt which was poured on them by orthodox economists, such as CANNING (in the *Quarterly Review*) and PEEL (speech on the Bank Charter Act). But no doubt in the pursuit of the monetary ideal they often wandered into the realms of "nonentity and nonsense" (Canning). F. Y. E.

IDEOLOGUE. A contemptuous epithet applied by the first Napoleon to the philosophic liberals who kept alive in France the ideas of the 18th century, and assailed the imperial system with literary and social weapons. Napoleon felt the contempt of a man of action for those who merely talked and wrote about politics. His experience of the French Revolution had inspired him with a profound dislike of system-makers and rhetoricians. It must be added that he could not endure frank and independent criticism of his grandiose but immoral and impracticable political schemes, his fatal endeavour to make France the tyrant of Europe, and his reckless continental blockade. Having silenced this criticism in the French parliament and press, he proceeded in 1803 to suppress the department of the moral and political sciences in the Institute, which included such well-known names as Volney, Chénier, Cabanis, and Daunou. They continued the contest with Napoleon in a periodical known as the *Décade philosophique* (see DESUTTS DE TRACY). F. C. M.

ILLEGAL CONTRACTS. Contracts infringing a statutory prohibition, or deemed illegal at common law, or considered contrary to public policy, cannot be enforced in any court of law. Wagering contracts, and contracts in undue restraint of trade, and contracts made for immoral objects, are among the best-known instances of illegal contracts. A policy on the life of any person in which the insured has no insurable interest is deemed a wagering, and hence an illegal, contract. Contracts that are in fraud of creditors or of the bankruptcy laws are not enforceable. A contract is unlawful where goods are sold by improper weights or measures.

[Pollock, *On Contracts*, 7th ed., 1902.] E. S.

ILLEGITIMACY. All children born out of wedlock are and remain illegitimate according to English law. The rule of the canon law which enables parents by their subsequent marriage to give the rights of legitimate children to their previous issue, and which is applied in Scotland and most continental countries, has never been introduced into England. English courts would recognise children as legitimate whose parents at the time of their birth and at the time of their subsequent marriage were domiciled in a country in which "legitimation per subsequens matrimonium" is recognised. Such children could not, however, in any case inherit by descent land situate in England. E. S.

IMMATERIAL CAPITAL AND IMMATERIAL WEALTH. The word capital has been made, at one time or another, to include every concrete good known to economics, many material and immaterial objects of desire not usually classed as goods, and even abstract conceptions hardly to be reckoned as objects of desire. These classifications are considered under CAPITAL (*q.v.*). We have here to consider the inclusion of immaterial entities under capital and wealth.

The commonest of these is "skill." Its inclusion under capital has been due to two analogies: (1) Skill is productive, and those who emphasise the productivity of capital naturally place skill under this head; (2) skill is costly. The expense of training a labourer of a specified grade of skill may be determined almost as accurately as in the case of a horse. In productivity and cost therefore skill is closely analogous to capital.

Against these analogies must be offset certain contrasts. (1) Skill, like fertility in soil, is not wholly the result of development. The cultivated man like the cultivated farm owes much in the way of productivity to investment, but the element of natural productivity, however hard to disentangle, cannot be ignored. A more marked contrast consists in the disposition of society towards a human creature as a commodity. A trained labourer is, in an economic sense, comparable to a machine or productive commodity having certain qualities of value; but for reasons happily beyond the pale of economics, society draws a deep distinction between the two (see WAGES). This distinction is artificial, but its profound importance cannot be doubted. Skill therefore resembles capital in being productive and costly; it differs from it in standing in a different relation to exchange and in many other respects. Convenience is the only just criterion for determining our classification.

The question therefore arises, What is usage on this point? It seems plain that when men apply the term "capital" to skill they do so in a purely metaphorical way, and that few things are more deeply contrasted in men's minds than labour and capital. The majority of prominent economists are also opposed to the inclusion of labour under capital. This inclusion causes economic questions to be regarded from an absolutely wrong standpoint, a habit which leads men to speak of dear labour in the same way in which they speak of dear coal. To make the similarity between these the basis of classification is certain to make men forget that from the social standpoint these are phenomena of exactly opposite significance.

Finally, we have to ask whether skill can be properly called immaterial. Good-will, patents, and guaranteed industrial privileges generally

are often reckoned as immaterial capital. When a business pays an income greater than normal interest on its invested capital, it acquires an additional value known as good-will, and roughly equal to the capital which would produce an equal sum at normal rates. In the case of many companies this is covered by an issue of stock. This stock, which becomes indistinguishable from the original issues, merely capitalises this extra dividend-earning power of the business. The sale of good-will is but a clumsier mode of transfer. Good-will, etc., may properly be called individual capital, but there is no propriety in calling it immaterial unless the latter term is extended to all stocks, mortgages, etc. These have more properly been called representative goods or capital, *i.e.* mere titles to the ownership of other goods material or otherwise.

[Schäffle, *Ausschliessende Handelsverhältnisse und Böhm-Bawerk, Recht und Verhältnisse.*]

We have still to consider a quite different theory. Some economists have maintained that capital does not consist of goods but of a quality corresponding to an immaterial essence contained in those goods. Thus M'Leod speaks of capital as "purchasing power" or "circulating power," and adds that it "does not represent commodities in any way whatever." Kühnast calls it "a complex of productive, material values." More explicit is J. B. Clark, who distinguishes between "capital goods," *i.e.* goods employed for acquisition or production, and "capital . . . a permanent fund of productive wealth, expressible in money, but not embodied in money." He adds: "There is a long list of assertions that are true of capital goods, and that directly contradict the truth, if they are made concerning true capital, or a permanent productive fund." It will be observed that he does not claim that capital is immaterial, and Kühnast speaks of it as "a complex of productive, material values," but it seems necessary to make capital immaterial if we are to distinguish it from goods. Otherwise the distinction vanishes or reduces itself to a mere difference in point of view. The last is probably Clark's meaning.

The first question is as before one of usage. Clark finds the double concept in popular and scientific use but unconsciously confused. Men recognise capital as a permanent fund expressed in money, while they recognise capital *goods* as constantly consumed and replaced. The distinction, however, is not certain. Men estimate capital in money, though it is composed of concrete goods, because heterogeneous goods have no other fact in common than value. When for other purposes people enumerate the items of their capital in a more exact way, this does not imply that they are talking of a different

thing. Nor does the fact that capital is spoken of as permanent, while goods are known to be transient, imply anything more fundamental. A herdsman, who buys and sells cattle continually, may say that he keeps a herd of a hundred cattle without implying anything else by the term herd than the shifting aggregate of cattle in his possession. A merchant who speaks of his stock would be surprised to learn that he is talking about something else than the goods in his shop.

The question whether there is utility in such a distinction if established is not easy to discuss. It has found no clear expression in popular speech, and few economists have used it. It is not clear that any important economic truth is dependent upon it or cleared up by it, though such a judgment may be premature. If unnecessary, a distinction so subtle should certainly be abandoned in the interest of simplicity. While it is important to recognise the constant consumption and replacement of capital on the one hand and its position as an aggregate permanency on the other, it is not clear that a redefinition of capital is desirable to that end.

[All important works on economics contain discussions of CAPITAL. See especially Mill, *Principles*, vol. i. bk. i. ch. iv.—Sidgwick, *Principles of Pol. Econ.*, bk. i. ch. v., 2nd ed. 1887.—Marshall, *Principles of Economics*, vol. i. bk. ii. ch. iv., 3rd ed. 1895.—Jevons, *Theory of Pol. Econ.*, ch. vii., 2nd ed. 1879.—Walker, *Political Economy*, pt. ii. ch. iii. 1883. By far the best general survey of the field of literature on this subject is found in Böhm-Bawerk, *Kapital und Kapitalzins*, admirably translated by Smart.]

H. H. P.

IMMATERIAL RIGHTS (see INCORPOREAL PROPERTY).

IMMEUBLES (Fr.) One of the two classes into which property is divided in France. The other is *meubles*. Those terms correspond in a measure to realty and personality in England. The words immovables and movables do not apply strictly, as there are numerous exceptions on both hands. Properties are *immeubles* by reason of their nature, or the purpose for which they are intended, or on account of the subject-matter with which they are placed in relation (Civil Code, art. 517). The first category comprises land, houses, buildings, crops ungathered, etc.; the second includes animals, attached to the farm, straw and manure, the inmates of rabbit-warrens, pigeon-cots, beehives and fish-ponds, implements and utensils for working farms and factories, etc.; the third, usufructs, right of way and other servitudes on *immeubles*. Art. 528 of the Civil Code classes as *meubles* by their nature properties that may be moved from one place to another, either by their own action, such as animals, or by extraneous force, like inanimate objects; thus ships are, by art. 531 of the Civil Code, and

art. 190 of the Commercial Code, declared to be *meubles*, they may however be mortgaged under laws of 1874 and 1885, contrary to the provisions of art. 2119 of the Civil Code, which states that no right over *meubles* can be acquired by a *hypothèque* (mortgage) of property remaining in the debtor's possession. The procedure for the execution of judicial seizures differs for the two classes of property.

T. L.

IMMIGRATION. The early history of immigration corresponds to that of COLONIES and EMIGRATION, and reference is made to those articles. By immigration is meant that movement by which persons, on their own responsibility, seek settlement in new countries with the intention of becoming permanent residents there. There is also temporary immigration, as of Italians into France during the harvest season, of French Canadians into the United States during the building season; but these movements are of local importance and cannot be treated generally. Permanent immigration, on the other hand, is a demographic and economic phenomenon of great importance to new countries such as the United States, Canada, Australia, the Cape colonies, and the republics of South America.

Immigration differs from colonisation inasmuch as the immigrants do not form a new community themselves, but are projected, so to speak, into a state and social organisation already formed, where they undergo a process of absorption and assimilation. When the new country is an independent one (e.g. the United States), all political and to a large extent social connection with the country of emigration is broken off. And even where the emigrant seeks a colony of his native country, many of these colonies are in modern times so nearly autonomous that the political and economic influence is much the same as if he had changed his allegiance.

The importance of immigration lies in two directions—namely, in the effect upon the happiness and well-being of the immigrant himself, and in its effect upon the community which receives him. In the history of immigration there have doubtless been frequent abuses, many cases where the immigrant has been deceived by false representations, or has made a mistake, so that he has found himself worse off abroad than he was at home. In many cases he has been unable to cope with the difficulties of the new life, and has either returned home a sadder man or been overwhelmed by adversity. But in the great majority of cases the immigrants have prospered and attained a position of comfort which they would never have reached at home. A more difficult question is the influence of immigration upon the countries which receive the immigrants. In the early history of new countries, additions to the labour-force have always been welcomed as

so much aid in the great contest with nature involved in opening up and settling waste tracts of land, in making them accessible by roads and railways, and in carrying on the general work of improvement. Later on, as the community begins to be more self-sufficing, and to feel more self-conscious, questions arise as to the *quantity* and *quality* of the immigration, whether it can be readily assimilated, and whether its character is such as to change the type of civilisation already established and which the community values. This is the modern immigration problem. It can best be studied by the experience of the United States of America, where immigration has been going on for the longest time and on the greatest scale (see art. on EMIGRATION).

Statistics of Immigration to the United States.

—Prior to 1820 there was no official record of immigration, but it is estimated that the total number of immigrants from the close of the revolutionary war to 1820 was 250,000. Prior to 1856 the records indicate the arrivals of alien passengers only, but it is estimated that 98 per cent of these were immigrants. The general course of the movement is shown by the following table:

Immigration by Decades.

Decade ending with	Aggregate arrivals.	Annual average.
1830	143,439	14,343
1840	599,125	59,912
1850	1,713,251	171,325
1860	2,598,214	259,821
1870	2,314,824	231,482
1880	2,812,191	281,219
1890	5,246,613	524,661
1900	3,844,420	384,442
1901-1904 . . .	2,809,068	702,267
Total	22,081,145	

In the total number from 1820 to 1890, and from 1895-1904, the principal countries are represented as follows:

Country.	1820-1890.	1895-1904.
Germany	4,504,128	276,246
British Isles . . .	6,235,277	560,551
Norway, Sweden, and Denmark	1,067,548	384,932
Austria-Hungary . .	434,488	1,018,376
Italy	388,558	1,134,233
France	366,346	33,788
Russia, Poland, and Finland	324,892	767,600
China	290,655	19,237
Switzerland	171,269	very small
Japan . . . . .	...	39,507

The proportion from the different countries

has varied. From 1821 to 1860 inclusive, over one-half of the whole immigration was from England and Ireland, the greater portion from Ireland. During 1861-70, 1871-80, 1881-90, 1895-1904, the proportions were as follows:

Country.	1821-1870.	1871-1880.	1881-1890.	1895-1904.
	Per cent.	Per cent.	Per cent.	Per cent.
England	24.54	16.38	12.53	12.11
Ireland	18.82	15.54	12.49	5.96
Germany	34.02	25.54	27.70	21.98
Austria-Hungary . .	34	2.60	6.74	8.31
Norway and Sweden	4.72	7.51	10.84	16.38
Russia & Poland . .	20	1.86	5.05	24.48
Italy	51	1.98	5.86	

¹ Includes Denmark.

² Includes Finland.

Sex.—During the decade 1880-1890, 61.10 per cent of the immigrants were males and 38.90 per cent were females.

Country.	Total.	Males of total.	Females of total.
		Per cent.	Per cent.
Germany	1,452,970	57.6	42.4
Ireland	655,482	51.0	49.0
England	644,680	61.3	38.7
Sweden & Norway . .	568,362	61.0	39.0
Italy	307,309	79.4	20.6
Russia including Poland	265,088	65.8	34.2
Austria	226,038	62.9	37.1
Hungary	127,681	73.8	26.2
Scotland	149,869	61.6	38.4

1904.—Males, 67.6; females, 32.4.

Age.—Of the immigrants arriving in the United States during the 10 years from 1881 to 1890, 21.4 per cent were under 15 years of age, 68.1 per cent were from 15 to 40 years, and 10.6 per cent were over 40 years of age.

Country.	Under 15 years.	From 15 to 40 years.	Over 40 years.
	Per cent.	Per cent.	Per cent.
Germany	26.6	62.2	11.2
Ireland	14.1	78.6	7.3
England	23.5	65.2	11.3
Sweden & Norway . .	18.3	73.0	8.7
Italy	15.3	69.2	15.5
Russia	24.7	65.9	9.4
Austria	22.1	66.3	11.6
Scotland	24.2	65.2	10.6
Hungary	14.7	74.9	10.4

Occupation.—The statistics show that only 10.35 per cent of the immigrants belong to the professional and skilled artisan classes. The remainder are unskilled labourers, women, children, or without occupation.

Causes.—Immigration varies considerably from year to year. Commercial distress in Europe drives immigrants to America, as after the Irish famine of 1846, and the German dearth

of 1853. Bad times in the United States discourage immigration, as during the civil war (in 1861 the immigration sank to 89,724), and the financial panic of 1873, after which the number sank steadily down to 1878, when it was only 138,469. The highest numbers were in 1882 when 788,992, and in 1903 when 857,046 immigrants landed in the United States. Aside from this general economic influence, there are two forces in constant operation which tend to keep up a regular stream of immigration. The first of these is the communication between immigrants and their friends at home. Thousands of letters are sent back annually urging their friends and acquaintances to follow them, and hundreds of thousands of dollars are remitted in order to pay the expense. The custom of the steamship companies in selling prepaid tickets greatly facilitates and encourages these efforts. This attractive force remains constant from year to year, although of course it is more active in good times when money is plentiful and places can be found for the new arrivals. A second powerful force in modern times is the activity of the great steamship companies. Enormous steamships sailing regularly every week must be filled. Competition is very keen, and hence each company has thousands of agents scattered through Europe for the purpose of inducing emigration, and thousands of agents scattered through America, selling prepaid tickets on commission. There is thus an artificial stimulation to immigration, inasmuch as the opportunity is given to all sorts of persons and the way made easy. In former times it required considerable energy and some money for a man to emigrate. At the present time it requires but little money and less energy. At various periods foreign governments, especially local authorities, have assisted criminals, paupers, and other undesirable persons to emigrate, but this has now generally ceased owing to protests from the side of the countries receiving the immigrants. So also at various periods new countries have sought to attract immigrants either by paying their passage or by giving them land and the means of settling; but this has generally ceased as the need for labour has become less pressing. The movement at the present time, therefore, is a purely commercial-industrial one, dependent, on the one hand, on the interests of transportation companies and, on the other hand, upon the supposed economic interests of the individual immigrant. It differs, therefore, from the movement of the 18th century, in which religious, political, and patriotic motives were more or less involved, and is to be treated principally from the economic standpoint. Immigration to the United States was affected by the cholera scare of 1892 and the panic of 1893. For the four years 1891 to 1894, and for the year 1904, the figures are as follows:

Year ending June 30th.	
1891	560,319
1892	623,084
1893	502,917
1894	314,467
1904	815,361

Such being the facts in regard to immigration we go on to inquire its effect on the population and economic condition of the United States.

Effect on Population.—It would seem that immigration must increase population by the number of immigrants and their descendants; and as the majority of the immigrants are in the most productive ages of manhood and womanhood, the natural increase of the population must be greatly accelerated. As, however, in the United States there is no complete registration of births and deaths, and as even in such registration as exists no distinction is made between natives and foreigners, we cannot determine what proportion of the present population is due to immigration since 1820. The census of 1900 returned 26,198,939 persons who were either foreign born or who had one or both parents foreign born. This represents approximately the population of foreign descent for two generations. But the immigrants of the earlier years are now represented by grandchildren or by great-grandchildren—that is, by the third and fourth generation, so that the above figure is entirely inadequate. If we should represent the survivors in the third and fourth generation by $5\frac{1}{2}$ millions, we should have the number 31,948,939 as representing the portion of the population due to immigration. A similar result is reached by taking the annual immigration since 1820, and applying to it the rate of natural increase for the whole population. We have no means of knowing, it is true, whether the rate of natural increase is the same for the foreign born as for the native born. It is probably greater, so that our result will be a minimum. Such a calculation gives us for 1900 about 32,000,000 descendants of immigrants, and 36,000,000 descendants of the white colonists.

It is sometimes denied that immigration has had any very decided effect in absolutely increasing the total population of the United States. It is said that the pressure of immigration has retarded the natural increase of the native population, so that the immigrants have simply taken the places which would otherwise have been filled by native-born Americans. The decreasing size of the American family is cited as proof of this tendency. We have no exact statistics upon this point. The census of Massachusetts (1885) showed indeed that the foreign-born women had a larger number of children than the native-born, but that there was a greater mortality among them. The just conclusion seems to be that while immigra-

tion is not a clear gain to the population, yet it acts as a powerful stimulus.

A more important result of immigration has been to introduce into the population of the United States great ethnical groups which are separated from each other either by race, by origin, or by parentage. The population of the United States consists now of the four groups shown in the following table :

Population of the United States according to colour, birthplace, and parentage, 1900.

Total population	76,085,794	100·00%
Native White, native parents	41,046,467	53·94%
Coloured population	8,840,388	11·62%
Foreign White	10,460,085	13·75%
Native White, foreign parents	15,738,854	20·69%

We have here four different elements entering into the population of the United States. The native Americans, that is, the native whites whose parents are native born, number a little over one-half of the total population. Upon this native American element is imposed three elements different either in race, or in birthplace, or in parentage. The first is the coloured, 11·62 per cent of the total population, composed principally of negroes. The second element, 13·75 per cent, is composed of white persons born abroad, that is, the survivors of the immigrants. This is the element by which the foreign influence on the institutions and people of the United States is exercised. The third element consists of native white persons whose parents, one or both, were foreign born. They may be called the second generation of the immigrants. It is evident that there may be, and probably is, an important difference between these last two classes. The native-born whites of foreign parentage are not to be regarded entirely as foreigners. Born in America, educated in the public schools, learning the English language, they have been subjected to the assimilating influence of American life. These assimilating influences are principally intermarriage, the exercise of political rights, common school education, and social intercourse with the native Americans. It is an important fact that in most of the states the second generation of the immigrants is already more numerous than the first. This indicates that the assimilating influences have a good field in which to work. On the other hand, there are also indications that the assimilating influences have thus far been effective. For otherwise we should certainly find great differences in language, customs, and laws in different portions of the United States, due to the different elements introduced into the population by immigration. The United States would seem to offer in this respect a unique opportunity to study the question of

the mixture of races or of nationalities. This, however, is a complicated sociological study into which we cannot enter here.

Economic Effects.—There is no doubt that the rapid development of the material resources of the United States has been greatly aided by immigration. It has furnished the labour-force necessary for the arduous task of opening up a new country, building railways, digging canals, exploiting mines, starting factories, and founding cities. In 1880 nearly 10 per cent of all the persons engaged in agriculture, 25 per cent of those in trade and transportation, and nearly one-third of those employed in manufacturing, mechanical, and mining industries, were of foreign birth. The domestic servants were for the most part females of Irish, German, or Swedish birth. The ordinary craftsmen, such as bakers, butchers, blacksmiths, coopers, masons, plasterers, etc., were largely immigrants or their descendants. The same is true of the employees in cotton, woollen, iron and steel, leather and other factories. A curious fact is that while the immigrants are, upon their arrival, mostly common labourers or agricultural labourers, yet only 23·32 per cent were found employed in agriculture, while 34·89 per cent were employed in mechanical, manufacturing, and mining industry. Doubtless great numbers were employed in the merely mechanical branches of these industries, but the figures show that the unskilled labourer can be readily trained to factory work.

A corresponding fact is that while the immigrants are for the most part from the rural districts of Europe, they congregate after arrival in the larger cities. In 1900, 49·5 per cent of the foreign born were found in cities of 25,000 inhabitants and over. This movement is due partly to the ignorance, inertia, and poverty of many of the immigrants, which retain them in the cities of the east where they land, instead of pushing them forward to the unoccupied lands of the west ; and partly to the modern preference for city rather than country life. It has important economic influence both for the immigrants and the country receiving them. It means a change of occupation and social environment for the immigrant, and an intensification of the movement towards cities which is one of the characteristics of modern civilisation. This movement in America has been accelerated by immigration.

Many attempts have been made to measure the direct economic gain to a country by immigration. There are two items to be considered ; first, the money or capital which the immigrants bring with them ; second, the economic value of the immigrants themselves. The amount of money brought by the immigrants to the United States is not large. For 152,860 immigrants landing at the port of New York during the first six months of 1892,

it was returned as \$20.09 (£4) *per caput*. This is offset by the large amounts of money sent back to Europe by the immigrants to aid and support their friends or to assist them to emigrate. It has also been suggested that the amount of wealth brought by the immigrants is much less than the *per caput* wealth of the people of the United States, estimated at \$1000.00 (£200), so that the average well-being is not increased.

The real economic gain to the United States by immigration consists in the value of the full-grown labour supplied to it by the countries of Europe. Various attempts have been made to estimate this in money. One way is to consider every full-grown immigrant as worth to the United States the cost of his bringing up to the age of fifteen. Estimating that at \$1000 (say £200), the 315,054 immigrants in 1890 between the ages of fifteen and forty would represent an enormous sum, \$315,054,000. A second method of estimating the economic value of the immigrant is to capitalise his future earnings over and above his future cost of subsistence, according to his probable after-life. This sum will represent the amount of wealth he may be expected to add to the community before he dies. Dr. Wm. Farr estimated the net future value of immigrants from Great Britain on this plan as £175 *per caput*. The money value of an annual immigration of 500,000 souls would be \$437,000,000 (say £87,400,000). In fact, as wages are higher, and cost of living not proportionately greater in the States, the real gain would be considerably more.

All these attempts to put a money value on the economic gain by immigration are fallacious. An immigrant is worth the cost of bringing him up only if he becomes an honest, industrious, able-bodied labourer. If he is vicious, idle, or infirm, then he is only a care and a burden to the community that receives him. So, also, there is no real capitalised value of his future earnings unless there is a demand for his labour. Immigration is of economic value to a country if the immigrants can be usefully employed. That is not a matter for statistical computation, but for general observation. The considerations which are of importance from this point of view are as follows:

(a) The need of unskilled labour in the new countries is much less pressing than it was forty years ago. This is due partly to the increase of population, partly to the employment of machinery on a grand scale, and partly to the fact that the most productive lands have been occupied. We have the same complaints in regard to lack of employment in new countries as in old. The tendency of the immigrants to congregate in large cities instead of spreading over the country makes the con-

gestion of labour still more acute. Immigration has passed beyond its first phase, where any and every sort of labour force was welcome for the purpose of opening up the country. A sign of this is seen in the general cessation of governmental efforts to stimulate immigration, and the indifference, not to say hostility, with which continued immigration is viewed.

(b) The immigration of criminals, paupers, persons diseased in mind or body, and persons unable to support themselves, is a direct economic and social detriment to the community. Since 1882 such persons have been refused admittance to the United States, and, when rejected, the steamship companies that brought them have been obliged to carry them back. Statistics for the United States show that the burden of public and private charity has been greatly increased by the indiscriminate admission of immigrants of all classes. No law of international comity is violated by the refusal to receive these unfortunates. They should be taken care of at home.

(c) Immigration sometimes increases the competition in the labour market, and thus lowers wages. It is often denounced by labour organisations on this account. One case is particularly aggravating, viz. when the employers import foreign labourers to take the place of their men who are on a strike. This renders all organisation of labour futile. The law of 1885 in the United States, commonly called the Labour Contract law, forbids the entrance of persons who are already under contract to labour there. But it is extremely difficult to prove the existence of such a contract. Outside of this particular case it does not appear that the ordinary competition due to immigration is felt by the labouring class in a new country where that competition is on the same plane of living.

(d) Immigration of masses of men accustomed to a lower standard of living than prevails in the new country may have a disastrous effect on the economic well-being of the community. An example of this is the Chinese immigration into the States (practically prohibited in 1882). The Chinese are industrious and thrifty, but they live in a way impossible for the American workmen to imitate. They never assimilate with the Americans or adopt western civilisation. Besides the social danger arising from the presence of such an alien element in a new country, there is the economic danger lest the standard of living of the whole labouring class should be brought down to their level. Some of the recent immigration from southern and eastern Europe raises the same question.

Restriction of Immigration.—Legislation in the United States has attempted to meet the dangers noted under the last three heads. The act of 1882 mentioned above has been

supplemented by the act of 1893, which provides for the exclusion of idiots and insane persons, paupers or persons likely to become a public charge, or suffering from a loathsome or dangerous contagious disease, convicts, polygamists, and contract labourers. The number excluded under the former acts was in 1890, 535, in 1891, 1026, and in 1892, 3732. The contract-labour law of 1885 excludes persons coming under contract to labour. The Chinese exclusion policy adopted in 1882 was made more severe by the act of 1888, which forbade the return to the United States of Chinese labourers who had left there, and by the Geary Act of 1892, compelling the registration of Chinese on pain of deportation. The latter act has not been enforced.

Future Policy in regard to Immigration.—

There is no doubt of the political right of a country to restrict or prohibit the immigration of persons whom it considers undesirable. During mediæval times such restrictions were universal. They fell into disuse owing to the increased facilities of communication between countries and the modern spirit of individual liberty. But a state must be sovereign in its own territory, and hence must have the right to exclude persons whose presence it regards as detrimental to its civilisation. In fact, we may say that this is the highest duty of a state, viz. to preserve its standard of civilisation. International comity demands that trade and travel should not be unnecessarily embarrassed, and that prohibitions should be directed against individuals as such and not against nationalities or races, unless the race as a whole proves incapable of assimilation. Numerous political and social effects are connected with immigration which prevent its being treated simply as an economic question. In a democratic country like the United States rapid immigration and easy methods of naturalisation throw political power into the hands of the immigrants, who are often ignorant, unaccustomed to the exercise of political rights, and sometimes venal. The foreign-born males of twenty-one years of age and over constitute 23·78 per cent of all the males of that age. In some of the western states and in many cities they constitute more than one-half. The social effects are felt in the abnormal number of the foreign-born in the poor-houses, asylums, hospitals, and prisons. Their participation in crime is not so disproportioned to their number if we take into consideration that the immigrants are mostly adults. These social effects influence legislation, and in the future the restrictive policy will be more or less severe according as the pressure of immigration is more or less keenly felt by the labouring class, and increase of crime and pauperism, outbreaks of anarchism and other social evils, are attributed by public sentiment to immigration.

Other Countries.—In the British colonies the question of immigration seems to be in almost the same stage as in the United States, only the movement has been smaller and the evils less felt. In Australia we find the same prohibition on Chinese immigration, and the same jealousy of the working-classes in regard to competition in the labour market. The countries of South America welcome immigrants more gladly, but many complaints are heard of the way in which they are treated.

[Besides the Bibliography in Richmond Mayo-Smith, *Emigration and Immigration*, New York and London, 1890, the following recent publications may be mentioned: *Quarterly Reports of the Chief of the Bureau of Statistics*, Treasury Department (No. 2, 1892-93), Washington, 1893. — *Report of the House Committee on Immigration and Naturalisation*, Washington, 1892. — *Correspondence relating to Chinese Immigration into the Australian Colonies*, Parl. Return, 1888. — *Indagini sulla Emigrazione Italiana all' Estero*, Roma, 1890. — Rossi, *Del Patronato degli Emigranti*, Roma, 1893. — Philippovich, "Die Vereinigten Staaten und die Europäische Auswanderung," in Braun's *Archiv für Sozialgesetzgebung*, etc., vol. vi. No. 2, Berlin, 1893. — Report by Burnett and Schloss on *Immigration into America*.]

R. M.-S.

IMMORAL CONTRACT. See ILLEGAL CONTRACT.

IMMOVABLES. By "immovables" is primarily meant such things as lands and buildings that cannot be moved. The term is used in a secondary meaning as including rights over immovable things. "The only natural classification of the objects of enjoyment," says Sir Henry Maine (*Ancient Law*, London, 1861, p. 273), "the only classification which corresponds with an essential difference in the subject-matter, is that which divides them into movables and immovables."

[As regards the historical development of the distinction, see Maine's *Ancient Law*; as to the importance of the distinction in modern law, see Foote's *Private International Jurisprudence*, 3rd ed. 1904.]

J. E. C. M.

IMPEACHMENT OF WASTE. A tenant for life of an estate—unless expressly declared to be "not impeachable for waste"—is not allowed to do any act, such as cutting down trees or opening mines, that would injure the inheritance. Such acts are called waste (see WASTE), and the tenant is said to be liable or impeachable for waste.

[Goodeve's *Real Property*, London, 1891.]

J. E. C. M.

IMPERIAL. Russian gold coin of the value of fifteen roubles. Weight, 199·1 grains; fineness, 900. Value (English standard) £1:11:8-79, (French standard) 40 francs. Half-imperials are of the same fineness, and of proportionate weight. Prior to 1886 the half-imperial was 916·6 fine and weighed 101 grains. F. E. A.

IMPORTS AND EXPORTS. Imports and exports are correlative terms; they denote the organic constituents of that which is known as commerce. Early opinion looked favourably on exports, regarding them as signs of successful trade.

In 1776 Adam Smith published his *Wealth of Nations*; in 1783 the first reference in parliament was made to that work; in the same year the younger Pitt became prime minister of England. This period may fairly be taken as the starting-point of the modern history of European trade. The closing years of the 18th century and opening years of the 19th saw almost universal war amongst civilised peoples; and the war was accompanied by extraordinary efforts to restrict and regulate the trade of the belligerents. It has been said that in the later years of the war Napoleon's chief object was to strike a fatal blow at English trade. The Berlin decree of 1807, and the counter-moves which it called forth, were evidence of the mischief he did to all (see CONTINENTAL SYSTEM). For thirty years, from 1785 to 1815, the trade of Europe was subjected to the double disturbance arising from constant war and from unreasoning interference of all descriptions. The next thirty years (1815-1845) represent a period of rest, and, as far at least as England was concerned, a period of transition. The remaining years of the century to our own time exhibit free-trade England dealing with a world mainly, almost universally, protectionist, and expanding her commerce to a degree of which the trade-reformers never dreamed.

A review of foreign legislation during this century shows that in varying degrees protection, sometimes contracting even to prohibition, has everywhere ruled abroad. Commercial treaties and the most favoured nation clause have been a palliative, but have not checked the inveterate evil. The establishment of the German ZOLLVEREIN in 1833 is a leading event in the period, but had little effect on external trade. The United States of America started the theory of absolute commercial independence as early as 1789; their consequent efforts at protection have not been uniform; they rose to their greatest height (before the recent Act) in the tariffs of 1824-28. In 1833 (the Clay tariff), and again in 1846 (the Walker tariff), opposite tendencies prevailed, but since 1860 there has been a gradual tightening of the cords.

The commercial history of Great Britain has been more interesting for this period than that of any other country. The closing years of the 18th century contained the germs of many changes. In 1784 England had parted definitely with her great colonies in the New World, and in 1788 she laid the foundations of Australia. About the same time Ireland was admitted to something like commercial

equality; in 1801 came the union. In 1804 England obtained a lasting footing in South Africa. The East Indian empire was being gradually built up throughout the period; the Company's East Indian trade being thrown open in 1813, and its China monopoly coming to an end in 1833. Again in 1785 Arkwright's patent was thrown open, and the use of machinery began to spread in the woollen and cotton manufactures. But till past 1820 the national life was weighted with commercial restrictions. "Everything conceivable was taxed," says Rogers. Smuggling was rampant; the tariff and excise laws were "all but universally disregarded." In 1825 through HUSKISSON (*q.v.*) the first indications of a change came, and the theory of a close colonial trade was broken down. The repeal of the corn laws in 1846, and the freeing of the tariff in 1861, were the final scenes in the commercial emancipation.

The commercial history of the British colonies is more recent. Canada and most of the Australian colonies have tended more and more towards protection. In most of the other colonies the customs tariffs have been sufficiently heavy to operate as some check to trade, but they remain revenue tariffs nevertheless. The discovery of gold in Australia in 1851 gave a special impulse to the trade of those colonies (see COLONIES).

It would have been interesting to compare the gross value of the trade of the world at the end of last century with its value at the present time, but the apparent impossibility of obtaining satisfactory statistics of exports and imports, even of the leading European countries, at so early a date has prevented this attempt. For Great Britain fairly trustworthy figures exist, and the same is true of the United States, and we therefore give tables illustrating the development of the trade of these two leading commercial powers of the world. It is clear that any development of the trade of a single great commercial power is an index of a general development of some magnitude; as an increase of imports by that power postulates an increase of the exporting power of other parts of the world and *vice versa*. And in the case of Great Britain it can be shown that her trade has always been widely distributed, and that its growth represents a corresponding development of many countries.

At the beginning of the century, Pitt, in the House of Commons, in the course of his resolutions of the 28th July 1801, dealing with the public debt, stated the increase in the exports and imports of Great Britain as follows:

	Imports.	Exports.
Average of six years to 1784	£11,690,829	£8,616,660
" " 1793	18,685,890	14,771,049
For the one year " 1799	29,945,808	24,084,000

The following table gives some idea of the growth of the foreign trade of the United Kingdom since Pitt's time.

Year.	Imports.	Exports.	Population.	Trade per Head.
	£	£		£ s. d.
1786	26,500,000	27,000,000	13,500,000	4 0 0
1800	53,250,000	52,000,000	15,000,000	7 0 0
1815	48,000,000	64,000,000	19,000,000	5 12 6
1820	58,000,000	45,000,000	24,000,000	4 6 0
1845	88,000,000	68,000,000	27,000,000	5 15 0
1860	210,530,873	164,521,351	28,900,000	13 0 0
1875	373,939,577	281,612,823	32,700,000	20 0 0
1890	420,691,997	328,252,118	37,800,000	19 16 8
1904	551,038,628	371,015,321	42,800,000	21 10 11

The figures of the earlier years, viz. from 1786 to 1845, are, so far as we know, the first attempt to give some idea of the actual value of exports and imports for those periods. The principles of the calculation are briefly indicated in the last paragraph of this article; it is enough to say here that the amounts have been calculated with great care and verified in different ways from the most authentic records. The trade between Ireland and Great Britain in 1786, 1800, and 1815 has been excluded, and the foreign trade of Ireland added; so that those years are on the same basis as the later ones. For figures which can only be approximate we purposely adopt round numbers.

The table justifies the following conclusions—

(1) In the first period, when invention was giving an impulse to industry, the exports and total foreign trade nearly doubled in amount and gave an increase of 75 per cent per head of population.

(2) The volume of foreign trade was practically stationary for the first thirty years of the century, but the amount of exports and imports fluctuated greatly as compared with each other.

(3) The turn for the better was coincident with free trade, and since 1845 the expansion of foreign trade has been continuous. The trade per head in 1860 was two and a quarter times as great as it was in 1845. It was more than half as large again in 1875. Since 1875, judging by the board of trade statistics, the average of the annual imports and exports per head of the population of the United Kingdom has, apart from an occasional drop, been fairly steady at £19 or £20.

(4) Imports have, as a rule, largely exceeded exports; the only year in which the exports materially exceeded imports being the year of Waterloo, and this fact agrees remarkably with the statement made by Macgregor that we paid our subsidies to the continent in that war in the goods of British origin for which, in spite of embargoes, there was such a demand on the continent. The theory of the excess of imports will be found fully treated in the article on COMMERCE.

That the trade of the United Kingdom has always been so diversified and widely ramified that its growth is a fair index of expansion

in other parts of the world may be gathered from an inspection of the tables of trade with different foreign countries. For the trade of the present day there are the board of trade abstracts. But the same tale is told by an examination of old parliamentary returns. In 1786, for instance, the following countries participated as follows in English trade:

Germany—total trade with England	£1,763,952
Holland "	1,842,057
Russia "	1,717,604
United States "	2,443,574

and there was a large trade with our own possessions in Asia and the West Indies. A century later, in 1890, the total trade with the countries above mentioned, which we place here merely for comparison, was as follows:

Germany—total trade with England	£56,589,612
Holland "	45,245,007
Russia "	32,597,022
United States "	143,623,361

The comparison of such figures indicates the general growth of trade in the world.

The following figures exhibit the growth of the imports and exports of the United States.

Year.	Imports.	Exports.	Total per head of pop.
1840	\$107,141,519	\$132,086,000	\$14'05
1848-50 aver. of 3 yrs.	160,331,562	150,568,652	14'34
1858-60 do.	327,835,845	360,518,736	21'54
1868-70 do.	432,578,609	551,544,737	27'67
1878-80 do.	666,966,641	833,229,300	30'07
1888-90 do.	793,558,886	814,880,892	27'40
1898-1900 do.	721,046,442	1,261,662,235	23'60

Mr. Farquhar (*Econom. and Industr. De-lusions*) states that the total exports in 1806 and 1807 exceeded \$100,000,000, and that this sum was not surpassed till 1834, and he shows that the amount per head of exported merchandise only, excluding specie, rose from \$5½ in 1821 to more than \$13½ in 1890, having been as high as \$17½ *per caput*. This in spite of the unwise commercial policy which Mr. Farquhar seeks to expose. But steady as the progress of trade per head had been, it did little more than double itself between 1840 and 1880, whereas in that period, as we have seen above, British foreign trade was nearly quadrupled. At the present time the external trade of the States per head of population is not many more dollars than that of Great Britain is pounds sterling; and it seems to be declining.

As a further indication of the growth of trade in the world, we append a table showing the exports and imports of seven chief European countries up to 1890 during forty years; and we have added those of Mexico, Brazil, and Chili, as giving some indication of the development in Central and South America, to which so much European capital has of late years flowed. As far as possible bullion and specie

are omitted, but not for Holland, Spain, or the American States; it is impossible to obtain complete uniformity either of years or method; but the average results of the table are sufficiently correct to support general inferences.

IMPORTS.

	1850	1860	1870	1880	1890
£	£	£	£	£	£
Austria	16,015,620	23,083,040	26,230,000	50,112,500	50,900,000
Belgium	16,500,000	39,850,000	49,500,000	98,464,000	127,826,400
France	46,309,250	106,290,520	111,259,720	196,300,680	175,932,000
Germany	27,537,292	no return	no return	no return	292,234,500
Holland	24,500,000	38,383,000	49,300,000	60,000,000	108,312,500
Russia	16,060,000	25,900,000	45,500,000	65,000,000	54,673,800
Spain	6,882,403	17,500,000	19,000,000	15,500,000	37,645,517
Mexico	no return	3,000,000	4,695,600	6,000,000	7,230,000
Brazil	7,500,000	13,200,000	19,000,000	25,000,000	23,342,000
Chili	2,800,000	4,900,000	5,200,000	4,500,000	8,850,000

EXPORTS.

	1850	1860	1870	1880	1890
£	£	£	£	£	£
Austria	12,237,885	25,680,308	32,650,000	55,250,000	64,280,000
Belgium	16,000,000	35,712,500	49,000,000	85,500,000	117,928,073
France	65,186,500	125,920,000	114,406,286	136,024,560	180,120,000
Germany	25,357,000	no return	no return	no return	246,935,000
Holland	19,687,785	32,603,000	42,200,000	44,500,000	80,627,696
Russia	20,700,000	27,067,000	48,678,000	68,000,000	58,520,000
Spain	4,975,000	11,898,520	12,900,000	17,500,000	37,510,395
Mexico	no return	2,125,000	4,827,000	6,000,000	9,615,300
Brazil	6,821,777	13,700,000	22,500,000	30,900,000	39,500,000
Chili	2,457,280	5,650,000	6,000,000	8,500,000	10,000,000

The figures in the above table given under each year are usually the mean of two or more years around the year of the decade. It has been impossible, owing to imperfections in all the returns, to take the same years for each decade, or for all the countries in any one decade; but the variations are not material. The sterling amounts are mostly taken from board of trade returns.

It will be observed, that the volume of exports in all these countries increased at an even faster rate than those of England. Between 1850 and 1860 in this country exports rather more than doubled themselves, and between 1860 and 1890 they again did the same. But in the latter period those of Belgium and Spain were trebled, those of Holland rose to four and a half times their former amount; and the other countries selected except France increased their output as fast as our own country. Germany in the whole period increased its exports nine-fold. The growth of the imports is in much the same proportion. There has been no marked change in the figures of the above table during the last fifteen years, except the very large increase of trade which is found in the case of France and in a lesser degree Holland. The deductions remain broadly the same. So that without going into the rate of growth per head of population in each country, allowing for incorrectness of figures and divergence of method in returns, it may safely be inferred that everywhere increase of trade has been considerable. And this increase appears to have been hitherto largely independent of the trade policy of each particular country.

We shall now come back to Great Britain and examine the growth of its trade with its own colonies during a century past, and then compare its colonial trade with its foreign trade, as some considerable questions are centred in that comparison.

The following tables show the trade of Great Britain and Ireland with the rest of the empire at three periods. In the year 1815 the germs of the colonial empire of Great Britain as it now exists had been finally established. For 1855 careful returns are available in regard to the colonies; and the new trade policy of Great Britain was well settled. With these years we compare the figures of 1904, as representing the present extent of the trade.

Imports into United Kingdom.			
	1815	1855	1904
£	£	£	£
Channel Islands	97,505	244,501	1,556,243
Gibraltar	199,587	70,021	29,297
Malta		201,075	47,833
North American Colonies	368,873	4,098,066	23,187,682
West Indies and Guiana	5,527,019	5,470,212	2,387,655
British Honduras		492,781	173,577
Australasia	nil	4,500,200	86,310,428
Indian Empire		12,068,732	86,472,686
Straits Settlements	8,042,292	615,738	6,283,820
Ceylon		1,474,251	4,135,027
Hong-Kong		no figures	466,811
Mauritius	141,479	1,723,807	264,554
Cape and Natal	325,045	949,640	5,457,494
West Africa and Gold Coast		282,780	2,456,972
Other Possessions		3,323	808,367
Totals	17,701,890	33,891,726	120,018,406

Exports from United Kingdom.			
	1815	1855	1904
£	£	£	£
Channel Islands	328,581	601,122	1,320,912
Gibraltar	1,201,142	906,185	1,037,395
Malta	957,647	702,813	1,273,001
North American Colonies	3,461,742	3,089,170	12,805,943
West Indies and Guiana	7,225,807	1,982,061	3,222,071
British Honduras		173,521	198,994
Australasia	40,519	7,221,625	26,788,650
Indian Empire		10,353,475	41,544,494
Straits Settlements	2,891,410	691,299	3,183,329
Ceylon		325,897	1,466,148
Hong-Kong		no figures	4,574,767
Mauritius		317,945	472,477
Cape and Natal	210,654	836,750	19,053,123
West Africa and Gold Coast	123,188	881,368	3,035,418
Other Possessions		69,964	956,779
Totals	16,430,496	27,653,235	120,788,496

The figures for 1815 in this return should be somewhat, but not a great deal, higher, as it has been impossible to ascertain and add to them the separate trade of Ireland in that

year with the British colonies; the total, however, would probably not exceed £17,000,000. Both imports and exports came near to doubling themselves between 1815 and 1855, while the imports nearly, and the exports more than, quadrupled themselves between 1855 and 1904. The increase of the total trade has been remarkable: in the case of the Australasian colonies it has sprung from £40,000 to a value of nearly £63,000,000; in the case of South Africa the exports of the United Kingdom have increased over ninety-fold, although the imports have increased in a much smaller ratio. The increased figures for South and West Africa are in part due to transfers—in the former case through the conquest of the Boer republics. One striking fact is not of course brought out by the table: within the last ten years the trade with several of the colonies, notably Canada, has doubled; with Natal it has almost trebled. Another point of interest is that in 1815 the West Indian trade is seen to be the greater part of the whole; it is now but one-fortieth of the aggregate, India taking the first place, with Australia closely following.

We may now turn to the trade of the United Kingdom in 1904 with various foreign countries.

Country.	Imports.	Exports.	Total Trade.
	£	£	£
United States	119,227,802	89,272,433	158,500,235
France & Colonies	52,606,294	23,108,248	75,804,587
Germany	33,944,322	36,427,850	70,372,172
Holland & Colonies	36,046,795	16,389,381	52,436,176
Russia	31,402,838	15,285,157	46,687,995
Belgium	27,536,425	13,474,492	41,010,917
Sweden & Norway	15,351,917	8,852,276	24,204,193
Spain & Canary Islands	15,215,087	5,869,647	21,084,734
Italy	3,324,822	9,222,799	12,547,621
S. Amer. Republics	38,658,867	26,077,687	64,736,554
Other Places	57,615,073	56,251,860	113,866,933
Total	431,020,222	250,231,825	681,252,047

The table has been so arranged as to show the order of magnitude of our total trade with the United States of America and the chief European countries; and one thing which is obvious on the face of the two last returns is that the foreign trade of England is far more valuable at the present time than the trade with the British empire.¹ It is well to lay stress on this fact at a moment when Great Britain is often exhorted to let one trade perish so long as she holds the other. The imports from the United States alone are equal to those from the whole of the colonies and India; though the latter are thrice as good customers for our exports as the States. In the European countries enumerated we find a market at least as valuable as that of our own possessions. The sum total of our foreign trade is not so very far from three times as great as that of our colonial trade. Yet if we

compare the trade per head of population in each case, the comparison is immeasurably in favour of our own possessions. Against this in turn we must remember the heavy debts which our colonies have contracted on the London market. In any case the figures are a sufficient warning as to the inevitable derangement which would result from hasty tampering with the course of our trade.

We proceed to give some idea of the total trade of the world, and the rate of exports per head in each country. The table which follows represents the trade of 1904:—

Country.	Pop. in Millions.	Imports. £	Exports. £	Exports per head of Pop. £ s. d.
BRIT. EMPIRE				
Un. Kgdom.	42.8	551,038,000	371,015,000	8 13 104
Malta	.21	9,730,000	8,444,000	40 4 2
Brit. India	232.07	101,617,000	120,646,000	0 10 4
Ceylon	.37	7,765,000	7,844,000	2 3 10
Cyprus	.24	472,000	488,000	2 0 8
Hong Kong	.28	8,672,000	933,000	3 5 9
Malay States	.68	5,396,000	9,781,000	14 8 8
Straits Sett.	.57	34,577,000	29,237,000	51 4 5
Other poss. in Asia	.81	5,119,000	4,777,000	5 17 11
Basuto Land	.35	298,000	172,000	0 9 9
Brit. W. Africa	40.00	5,738,000	5,066,000	0 2 6
Cape Colony	2.4	21,859,000	28,808,000	11 14 11
Cent. Afr. Prot.	.71	286,000	69,000	0 1 11
E. Afr. Prot.	2.96	518,000	234,000	0 1 7
Mauritius	.37	2,355,000	2,822,000	7 10 6
Natal	1.11	10,761,000	2,481,000	2 0 11
Orange R. Col.	.38	3,798,000	1,758,000	4 10 7
Rhodesia	1.25	1,214,000	1,506,000	1 4 1
Transvaal	1.35	14,822,000	17,771,000	13 8 10
Uganda	4.00	150,000	67,000	0 0 4
Zanzibar	.3	1,239,000	1,211,000	4 0 8
Other pos. in Africa	1.2	491,000	276,000	0 4 7
Canada	5.87	53,282,000	43,890,000	8 3 5
Bermudas	.02	632,000	158,000	8 15 10
Falkland Is.	.002	49,000	127,000	63 5 7
Guiana (Brit.)	.29	1,479,000	1,991,000	6 15 5
Honduras (Brit.)	.04	361,000	383,000	10 7 3
Newf. & Lab.	.22	2,113,000	2,193,000	9 19 4
West Indies	1.57	6,801,000	5,821,000	3 14 0
Australia	3.77	37,021,000	37,488,000	15 4 9
B. N. Guinea	.35	77,000	75,000	2 4 4
Fiji	.12	453,000	590,000	4 18 4
New Zealand	.82	13,291,000	14,748,000	18 1 6
Pacific Is.	.21	160,000	156,000	0 14 10
		903,075,000	742,579,000	
Afghanistan	4.5	806,000	917,000	0 4 1
Argentina	5.68	42,445,000	53,152,000	9 1 9
Aust.-Hung.	47.83	89,925,000	89,220,000	1 17 8
Belgium	7.07	179,074,000	155,555,000	21 10 8
Bolivia	2.27	1,586,000	1,693,000	0 14 11
Brazil	17.37	25,915,000	39,430,000	2 5 4
Bulgaria	3.98	5,188,000	6,305,000	1 11 8
Chile	3.24	12,365,000	17,507,000	5 8 1
China	433.55	56,125,000	41,788,000	0 1 11
Colombia	2.95	1,880,000	2,260,000	0 15 4
Congo State	30.00	1,145,000	2,075,000	0 1 0
Corea	11.00	1,822,000	948,000	0 1 0
Costa Rica	.33	1,082,000	1,407,000	4 5 3
Cuba	1.57	16,567,000	17,994,000	11 9 3
Denmark	2.54	33,381,000	27,713,000	10 17 7
Danish Cols.	.12	293,000	239,000	1 19 10
Ecuador	1.4	1,584,000	2,828,000	1 13 3
		471,183,000	460,541,000	

¹ Originally written in 1892.

¹ Exclusive of bullion and specie and of foreign merchandise transhipped under bond.

Country.	Pop. in Mill- ions.	Imports. £	Exports. £	Exports per head of Pop. £ s. d.
Egypt . . .	9-82	471,183,000	460,541,000	2 9 2
Finland . .	2-81	28,900,000	24,155,000	3 1 4
France . . .	39-2	10,684,000	8,624,000	6 2 10
Algiers . .	5-23	259,778,000	239,569,000	2 1 7
Tunis . . .	2-00	14,696,000	10,888,000	1 1 8
Other Fr. Pos.	56-11	3,335,000	3,073,000	0 5 4
German Emp.	59-5	16,465,000	15,007,000	4 14 3
German Poss.	12-68	855,687,000	280,264,000	0 2 0
Greece . . .	2-64	2,795,000	1,375,000	1 7 5
Guatemala .	1-84	5,481,000	3,628,000	0 15 10
Haiti . . .	1-42	1,002,000	1,510,000	0 4 4
Honduras . .	5	829,000	310,000	0 18 0½
Italy . . .	33-14	549,000	451,000	1 19 1½
Italian Dep.	2-8	80,295,000	66,241,000	0 8 0
Japan . . .	47-21	311,000	112,000	0 18 11
Liberia . .	2-12	42,736,000	44,618,000	0 0 11
Mexico . . .	13-6	134,000	98,000	2 1 11
Montenegro .	2-23	17,820,000	28,545,000	3 1 9
Morocco . .	4-58	194,000	71,000	0 7 4
Netherlands .	5-5	2,741,000	1,690,000	30 7 5
Dutch B. Ind.	36-00	208,512,000	167,351,000	0 13 8
Dutch Guiana & Curacao .	1-12	17,321,000	24,634,000	2 17 10
Nepaul . . .	5-00	843,000	347,000	0 6 10
Nicaragua . .	4-2	893,000	1,724,000	0 6 3
Norway . . .	2-3	107,000	131,000	4 13 8
Oman . . .	8	16,304,000	10,769,000	0 4 9
Paraguay . .	6-8	398,000	191,000	0 13 3
Persia . . .	7-65	713,000	418,000	0 10 9
Peru . . .	4-6	5,382,000	4,182,000	0 17 9
Portugal . .	5-16	4,298,000	4,066,000	2 3 8
Portuguese Pos. . . .	9-14	18,273,000	11,288,000	0 6 0
Roumania . .	6-39	5,237,000	2,757,000	1 14 4
Russia & Siberia . .	143-08	12,455,000	10,475,000	0 14 9
Salvador . .	1-00	68,760,000	106,229,000	1 6 6
San Domingo	4-2	722,000	1,327,000	8 2 4
Servia . . .	2-6	547,000	1,309,000	0 18 10
Siam . . .	3-80	2,437,000	2,486,000	1 14 3
Spain . . .	19-2	4,364,000	5,650,000	2 1 0
Sweden . . .	5-26	38,641,000	39,328,000	4 7 9
Switzerland .	3-43	32,136,000	23,040,000	13 6 3
Turkey . . .	24-03	80,725,000	62,725,000	0 11 2
United States	81-75	21,457,000	13,414,000	4 1 2
U.S.A. Pos. .	7-46	232,898,000	331,616,000	1 8 1
Uruguay . .	1-04	8,214,000	10,469,000	7 16 9
Venezuela . .	2-6	8,404,000	8,151,000	1 4 10
		2,378,000	3,228,000	
		2,101,434,000	2,038,315,000	

Further, we observe that the imports on the whole exceed the exports, particularly in the case of the British Empire. All those imports must be somewhere in the other column of the return as exports, but by the time they appear as imports their money-value has increased by the amount of freight and other charges.

In giving figures to show the comparative producing power of the different populations, we have confined ourselves to the rate per head of exports.

In order to show the trade of the United Kingdom as close to the reality as possible, the transit trade and the movements of bullion and specie have been omitted in its case, as stated in the note to the table. This omission of the transit trade explains why the exports of the United Kingdom appear as about £9 per head, while those of Malta and the Straits Settlements are respectively £40 and £51. The Netherlands also and Belgium are influenced by the same cause, and appear as exporting £30 and about £22 respectively per head of the inhabitants. The figures, therefore, cannot be taken by themselves as indicating the prosperity of a country; but where they are very small, as in the case of Turkey, Russia, and China, they no doubt reflect the extent of the trade of the country with the rest of the world.

We have hitherto been concerned chiefly with the statistical side of our subject; we have used values as the most convenient form of indicating the wealth involved; comparative value of trade being some index also of comparative volume; although, when we have to do with specific deductions from these figures, there are many cases in which the quantities of commodities and their prices must be examined with care.

There is, however, quite another side of the subject, which is of no little importance, though it cannot here be dealt with at length. The economic lesson of tables of exports and imports—their teaching as to the life and occupation of the people—is one of the most important branches of the study, and one that is usually neglected. This must be shown by tables of the kinds of articles exported. We find in the case of Great Britain a complete change in the nature of its trade during the period under review in this article. Until some years later than 1750 England uniformly exported grain and rough woollen goods; with the closing years of the 18th century she was developing manufactures at home, and her mercantile marine was bringing in tea, sugar, spices, and other tropical produce from her colonies. This was the transition; to-day an examination of her trade-returns presents the picture of a country all but exclu-

The materials at command do not admit of this table being perfect. There is a large balance of trade done in the world which is nowhere recorded. Many of the figures are rough averages. The conversion from foreign currencies into sterling admits new error. The varying methods in which returns are compiled is another difficulty. The case of transit trade is yet another, for the same goods may appear under two or three countries. Further, bullion and specie are omitted in some of the returns, but as a rule are included. It has been impossible to reduce the returns to a fixed principle in this respect.

Yet with all these drawbacks it may be taken to show roughly that the exports of all the countries of the world amounted to £2,780,000,000 in 1904; that 743 millions came from the British Empire, and about half that amount, or 371 millions, from the United Kingdom.

sively dependent for her food supply on foreign nations; and exporting her manufactures to every part of the habitable globe. Carrying this economic examination of the returns to those of the colonies, we are struck by the capacity of the British empire to depend entirely on itself in case of need; distance, however, being the great difficulty in the way of a realisation of this imperial independence. No other country in the world, save Holland, stands in anything like the same position as to the imports of the necessities of life; but the colonial empire of Holland, important as it is, is entirely different in character from that of the United Kingdom. If we turn to the table of the world's trade and treat it similarly, we shall be able to classify the countries of the world according to their production of the necessities of life, of luxuries, of raw materials, of manufactured goods; and the classification will obviously form a basis for a further sociological examination of the condition of each people.

Another point which may be illustrated by figures of exports and imports is the effect of war on the interchange between nations. War may act in two ways: in checking production and in diverting the course of trade. A great falling off in exports and imports, or a sudden development of trade with a particular country, may equally be the result of a state of hostilities. The trade of the United Kingdom in 1815 and 1855, and the years around these points—the trade of the United States in 1860 and onwards—that of France in 1869-1872, all illustrate the principle.

It remains to consider briefly the value of the available figures representing the trade of various countries. In the length of time for which even approximately accurate figures can be obtained, Great Britain is far ahead of other countries. Probably the United States come next, although we have had great difficulty in tracing any figures at all in the early part of the century. It is a matter of serious doubt how far any set of figures represents what it professes to represent; thus the statement of the trade of the world above given is in the broadest sense provisional, for there are scarcely any countries which make their returns on the same basis. Even the British possessions vary from one another and from the correct system of calculation; they are not even always *bona-fide*. In 1883 a witness before an inter-departmental committee on the subject of the statistical returns of the British empire admitted that it was at one time a practice in the colony which he represented to cook the returns, so as to accord with the theory that exports should exceed imports. The divergence between official and real values in the figures of British trade prior to 1854 we have already mentioned (see also

DECLARED AND REAL VALUES). The official figures up to that date were founded on valuations of products settled in 1694; these valuations probably held good well into the 18th century; but towards the close of it they had got very far out, and official reports began to recognise this. The inspector-general of imports and exports, after making his official return, would add a computation of the real values. For the adjustment of the imports we have to rely upon general inference from those computations, and upon the fact that in 1854, when the new system was introduced, the real value was found to exceed the official value by 22½ per cent. In regard to the valuation of exports material for adjustment came in during 1798; from which date the declared value of British produce exported is found side by side with the official value; exceeding it by 68 per cent in the first year, and by a diminishing percentage until 1820, when the divergence went the other way, and official value rose from 5 per cent in excess to about 150 per cent at the date when the fictitious official value was finally discarded. It is obvious that any argument based on the official figures was misleading; and we have therefore in this article used all the material at command in adjusting the figures and checking the adjustment, until we obtained figures which, as nearly as it can ever be done, represented the course of the trade of Great Britain prior to 1854. It will, however, be many years before general correctness can be obtained and we can hope to have from every country exports calculated at their value at the port of shipment, and imports representing the value as exports *plus* the value of the freight, insurance, etc., while transit trade is carefully eliminated from importation for consumption. The variant practice as to bullion and specie also needs correction. The separation of these commodities from merchandise is usual in modern statistics and is adopted by the board of trade; it is due to some sort of recognition that they are often in the nature of a transit trade; but the analysis is very imperfect and probably as often wrong as right.

[There is no single work on the study of exports and imports which can be referred to. Sir R. Giffen's essay on the use of import and export statistics, published in the second series of his *Essays on Finance*, is quite the best summary of the theory of the matter.—In Marshall's *Statistics of the British Empire*, 1800-1833, there is a useful introduction to the tables of exports and imports, vitiated by the old fallacy as to official values.—*First Report of the Commissioners of Customs and Appendices* (1857).—The Board of Trade annual *Statistical Abstracts* of the trade of (1) the United Kingdom, and (2) the British possessions.—The similar abstracts of the trade of foreign countries from 1830 to 1860.—Various valuable returns laid before parliament.—The

Statesman's Year-Book and *Annuaire de la Statistique* summarise the returns published by foreign countries.—The *Consular Reports* published annually for Parliament give more detailed but partial information as to foreign countries.—Macpherson's *Annals of British Commerce*, *passim*.—Pitkin, *Statistics of the United States*, New York, 1817.—Porter's *Progress of the Nation*, 1847, § iii. ch. ix.—M'Culloch, *Account of the British Empire*, vol. ii. pt. iii. ch. v.—List, *System of National Economy* (translated, 1885).—S. Bourne, *Traile Population and Food*, 1880, chs. i., ii., iii., viii., ix., xi. See also COMMERCE and BALANCE OF TRADE.] C. A. H.

IMPORT DUTIES.

History of Import Duties, p. 387; Incidence of, p. 389; Specific *v.* *ad valorem*, p. 389; Amount of Duty, p. 389.

History of Import Duties.—A reference to the article on EXPORTS, DUTIES ON, will show that duties on imports, though now so much the more important, were instituted later in time, at any rate in England, than export duties. At first the two were not thought of as distinct forms of taxation: both were merely an impost on the trader. The custom called Scavage, which we find, in the reign of Henry III., levied on all sorts of merchandise brought from beyond seas, was akin to an import duty, and the PRISAGE on wine was practically one taken in kind. But the first real import duties date from 1304, under the name of *parva custuma*: they were levied on foreign merchants only, and in addition to other existing duties, as follows:

Wine, per dolium 2s.

General merchandise, 3d. in the £1 *ad valorem*.

On 20th August 1309 these duties were suspended with a view to seeing whether consumers would gain in the price; but on 2nd August 1310 they were re-imposed, as "no advantage had ensued either to the king or people." The duty on wine came to be called *tunnage*, and the *ad valorem* duty *poundage* (see TUNNAGE AND POUNDAGE); and these under the name of SUBSIDY became a regular part of the financial system of England. In 1548 the duty on wine was 3s. (except for Rhenish), and the poundage 12d. in the £1, or 5 per cent.

The progenitor of the modern tariff rose in the shape of the BOOK OF RATES at a comparatively early period. This book, issued at first by the sole authority of the crown, enumerated the values which were to be assigned to different articles for the purposes of calculating the *ad valorem* duty just referred to. "These values were probably in the earliest instances the current prices of the articles imported." One of these rate-books was "imprinted in 1545." The principle of assessment was laid down ten years later (1555) as "to underrate the most necessary commodities that came into the realm, to draw them hither, and to overrate the superfluous commodities inwards to drive them away."

James I. was not satisfied with this principle, and declared that everything required to be rated higher. He levied a new imposition in addition to the subsidy, thereby complicating the form in which duties were received, and in many cases doubling the revenue which parliament had intended him to derive. This gave rise in 1642 to the issue of a rate-book by the Houses of Parliament only. The book issued in 1662 enumerated 1139 articles inwards; and 212 outwards (see ENUMERATED COMMODITIES).

In the ensuing century it became a growing practice to impose fresh import duties by special acts in special emergencies; and by 1784 no fewer than 100 new heads of account referable to different funds—*e.g.* aggregate fund, sinking fund, general fund, etc.—had been opened in the customs department, under any or all of which any given article might be liable to duty. An example of this "bewildering and appalling chaos" is given on p. 18 of the First Report of the Customs Commissioners. Merchants hardly knew what they had to pay without expert assistance; even officers at the outposts were sorely puzzled. The whole system hindered trade, and lent itself to smuggling; so that, in spite of the mercantile theory, which enforced the view that protective import duties were an encouragement to the country's trade, it became felt that the existing system was intolerable. The first step in the direction of reform was made by Pitt's Customs Consolidation Act in 1787. This rated 1200 articles for duty inwards; of these 300 were rated *ad valorem*. It also provided that all import duties should henceforward be carried to one fund, now known as the Consolidated Fund.

But in the moment that the collection of the import duties was simplified, the idea which assigned to them an important function in enhancing a nation's wealth appears to have gained new strength. For forty years thereafter the followers of ADAM SMITH made no impression on the idea. HUSKISSON, as chancellor of the exchequer in 1825, was the first statesman who showed the possibility of dispensing with a multiplicity of import duties. Sir Robert PEEL, in the tariff of 1841, made the next move; and with the triumph of the free-trade policy the numbers of articles subjected to duty rapidly diminished, as the following table will show:

Year.	Principal articles.	Subdivisions.	Total number.
1660	490	1140	1630
1787	290	1135	1425
1826	432	848	1280
1841	564	488	1052
1849	233	282	515
1855	153	261	414
1861	19	123	142
1876	10	32	42

At the same time the customs revenue showed no signs of decrease.

In 1855 it amounted to	£22,227,570
„ 1860 „ „	24,391,084
„ 1865 „ „	22,527,378
„ 1870 „ „	21,449,843

As a matter of fact there was a considerable expansion due to causes amongst which the progressive simplifications of the tariff had a considerable place. It is calculated that the customs duties remitted between 1855 and 1870 amounted to £14,872,331, and those imposed to £612,915, showing an estimated loss of revenue of £14,259,416, which never took place, as the figures above quoted have shown.

In 1860 there were duties levied on the importation of nineteen articles, in 1890 on ten only, excluding certain minor divisions under "spirits." The subjoined table shows those which had dropped out, and compares the produce for the two dates.

	1860	1890
Sugar, etc., producing . .	£6,100,288	abolished
Tea	5,444,157	£4,490,506
Coffee	445,999	172,832
Corn, etc. . . .	751,046	abolished
Butter	23,881	do.
Currants	233,897	} 534,831
Raisins	103,196	
Wood	294,134	abolished
Tobacco, etc. . .	5,674,053	9,061,984
Wine	1,174,103	1,302,160
Spirits	2,413,919	4,681,225
Silk manufactures	16,576	abolished
Other articles . .	490,515	183,157

Since 1890 there have been two important changes in the tariff. In 1901 the sugar duty was reimposed, and in 1902 a duty on corn was imposed for one year as a temporary measure. The tariff of the United Kingdom, then, subjects the minimum number of commodities to taxation.

In the import duties of various British colonies we find considerable divergences, illustrating different phases of history. Those of the older colonies, especially the West Indies, have always borne the stamp of the old cumbrous régime; those of the Australian colonies began with a levy of *ad valorem* duties on a few imported articles; but developed, as in Canada, into an engine for protection. The hand of Canadian legislators has been forced by the proximity of the United States; after an effort in 1867 to work with moderate import duties, the colonial manufacturers overbore the liberal opposition; and the "national" policy of Sir J. Macdonald has, since 1879, been driving the Dominion into stricter forms of protection, chiefly directed against the

United States. The tariff of Canada now fills twenty-seven closely-printed columns of a parliamentary return, and makes a respectable pamphlet by itself. Even Victoria's covers eleven only. The spirit of the new protection has caught all the Australian colonies except New South Wales. Their high duties are directed alike against the mother country and the foreigners. The Cape has been slowly tending to imitate Australia. The Eastern and West Indian colonies, with some exceptions, have tariffs which are in form a survival of the old mercantile system, but their duties are levied simply for revenue purposes, and their rates are rarely excessive. As most of these colonies are under the more immediate control of the crown, there has been a considerable effort made to simplify their tariffs, and remove the duties on food-stuffs and necessities, but the success has been small; local opinion, particularly in the West Indies, argues that imported food-stuffs are to the negro or coolie a luxury, and that by giving up the duty on such articles, an easily-collected revenue would be lost without one whit improving the condition of the labourer (*cf.* COLONIES; COLONIAL POLICY).

India, following the lead of the imperial government, keeps to a small and purely revenue tariff of import duties.

The history of import duties in the European continental countries records a passage from restriction to moderate duties and a reaction to rigid protection. For the import duty is the engine of protection. France, down to 1860, had always adopted a system of jealous exclusion. Macgregor, in 1841, calls the commercial legislation of Spain "the most pernicious and restrictive of all the systems of trading exclusion." The same condemnation was accorded to the other European tariffs except, perhaps, that of the German customs union, which had conferred incalculable benefit on the states included in it by breaking down the barriers of import duties between them, and assigning more moderate duties on the importation of foreign goods. The adoption of free trade by England induced Holland and other countries to modify their import tariffs. The treaty of 1860 with France marked a new era; restriction gave way to duties which, though still protective, were comparatively low. A great increase both in imports and exports was the immediate result. Other nations followed this example, and for some years the import duties of European countries were in practice regulated by treaties in the general interest. Then came the protectionist reaction, which Prof. Bastable dates from the Franco-German war of 1870; war expenditure and national jealousy gave a bias towards a system of heavier duties as between the two rivals; other nations followed with an idea of protecting themselves.

The United States have passed through various stages of doubt; from 1824 to 1875 their import duties were alternately raised and lowered for two or three years at a time; here again the great rise took place in the war period from 1861-65, and subsequent efforts at reduction made no great impression. Since 1883 the tariff has been severely protective, ultimately culminating in the cumbrous McKinley tariff of 1890, which laid crushing duties on all foreign manufactures. Since then both the Dingley tariff of 1897 and the Payne-Aldrich tariff of 1909 continue the same policy.

The South American states, influenced partly by the United States, and partly by European example, levy onerous duties.

To sum up: England stands practically alone in the world as a country with a simple and low tariff; in British colonies the tariffs are usually cumbrous, but fall into two classes,—the one where many import duties are merely the easiest way of getting revenue, the other where those duties are avowedly protective. Of foreign countries it may be said that, at the present day, all except Holland and Belgium which at a considerable interval followed England, have deserted the revenue and adopted the protective tariff.

Incidence of Import Duties.—The popularity of import duties as a source of revenue is usually and probably correctly ascribed to the fact that they are collected without application to any large number of the taxpayers. The question of their incidence has in England been settled for years; the accepted view being that all duties paid by the merchant on importation are added by him to the price of the commodity, and are thus eventually paid by the consumer. It is probable that in early days there was an idea that the foreign merchant paid the tax. But it soon came to be understood that they were at least usually paid by the consumer and not by the merchants; the order of 1809 (see page 367) seems to be clear evidence of this. The proposition that they are actually paid by the merchant himself has been advanced in recent controversies with some of the British colonies, more particularly those in the West Indies, where it is commonly held that an increase of 5 per cent in an *ad valorem* duty cannot be put on the price, but must be borne by the merchant, and, on the other hand, that a remission of duty benefits the merchant only, as price is not affected. This view, however, is difficult to support, and has been contradicted by its advocates in the course of their own arguments. An opposite view was held in the case of these very colonies in 1842 by both the parties to the controversy whether higher import duties were the best means of increasing the inducement to the negro to work (Earl Grey's *Colonial Policy*, vol. i. p. 80 *et seq.*). Again, it has been advanced, chiefly in the

United States, that protective import duties are paid by the foreigner; but this cannot, properly speaking, be true for long, even when the foreigner's market is restricted to the nation which imposes the duty. The foreign producer, if the consumer declines to pay a higher price, may consent to forego for a time a part of his ordinary profits, and in this sense he may "pay the duty"; but eventually he will cease producing; if he is willing to accept a permanently lower rate of profit, this can hardly, in economics, be spoken of as paying the duty. As an illustration we may cite the case of the Bermuda onion-growers, who sent a deputation to New York in 1893, with a view of obtaining concessions in the matter of the import duty on onions. As interesting examples of the operation of certain import duties, we may refer to the old duties on sugar (*v. McCulloch, Taxation*, p. 210), and those on corn (*v. Leone Levi, On Taxation*, pp. 77-79).

Specific v. Ad valorem Duties.—The question of specific or rated as against *ad valorem* duties is one that has been vigorously debated, and cannot be considered settled; there are still high practical authorities who state that it costs no greater trouble to collect the latter than the former. The better opinion is, however, that *ad valorem* rates are constantly unfair, and give rise to unnecessary friction between the customs staff and the merchants; Mr. Gladstone, in his budget speech of 1853, adopted this opinion; the customs commissioners in 1857 stated that the labour of their officers had been greatly reduced in consequence of the diminution in the number of *ad valorem* duties. This is equivalent to economy in the cost of collection. The legislation of Great Britain has been based on this opinion; in 1797 there were 300 *ad valorem* duties, in 1842 there were 156, in 1855 they had been reduced to 40: they have now disappeared. In the colonies they remain in full force, though the home government, where it has influence, is gradually obtaining a change to specific rates.

A plan of combining a specific with an *ad valorem* duty on the same commodity has been adopted in the United States, and has spread to Canada. It hampers trade and adds to the labour of collection. Nearly akin to it was the old plan, adopted in England in 1840 and rejected in 1853, of adding a general percentage to all duties. This was till lately a favourite mode of raising additional taxation in many of the British colonies.

Amount of Duty.—It is a question of some nicety whether import duties should be adjusted so as to represent as far as possible a uniform percentage on the value of the commodity. Mr. Gladstone apparently adopted the theory in 1853, and placed the percentage at 10 per cent. But the nature and use of a commodity, and the extent of the demand for

it, may render a much higher percentage an equally fair tax. The highest *ad valorem* rate in any British colony upon general merchandise is 25 per cent; it is usually far lower. Protective tariffs load imports with duties which are usually at least 30 per cent, and the general basis of the McKinley tariff was 50 per cent for all manufactures.

This article would not be complete without reference to drawbacks and the methods of facilitating the collection of duties. DRAWBACKS (*q.v.*) were the original method of relieving a merchant of the payment of part of the import duty when he desired to re-export a duty-paid article. The statute 12 Car. II. c. 4, first admitted this, reimbursing the whole duty in some cases, half in others. In 1788 a fourth of the gross revenue of the customs was returned by way of drawbacks. This system was first modified by permitting the importation of articles merely on a bond for the payment of the duty; this gave rise to constant fraud, and was the source of much risk and additional labour to the government. The warehousing system, or deposit of commodities in BONDED WAREHOUSES (*q.v.*) until such time as the duty is paid, has almost entirely done away with drawbacks. They still, however, form a common item of account in colonial budgets.

[See sources cited under EXPORTS, DUTIES ON, especially *First Report of Commissioners of Customs*, 1857.—Leone Levi, *On Taxation*, 1860.—Kippax's translation of Ustariz' *Theory etc. of Commerce*, Dublin, 1752.—Macgregor, *Commercial and Financial Legislation of Europe and America*, 1841.—Farquhar, *Economic and Industrial Devolutions*, 1891, pp. 54-73.—Bastable, *Commerce of Nations*, chs. vi.-x.—*Returns of Colonial Tariffs*, c6402/91 and see c2337/04.—Hall, *Hist. of the Customs Revenue of England*.] C. A. H.

IMPORTS AND EXPORTS, FREEDOM AND RESTRAINT OF. We shall deal with Imports and Exports separately.

Free Imports.—This subject may be considered under two divisions.

(a) *General freedom of importation.* This matter may best be studied from the point of view of its converse (see below, IMPORTS, RESTRAINT ON): it is on the whole easier to show the results of moving contrary to natural laws, than to exhibit the working of a natural system. And though the general history of commerce seems to be the history of restriction, yet the natural impulse of commercial man is to exchange his products with others free from let and hindrance.

The leading commercial nations of the middle ages admitted imports free of duty, or at a low duty: and the leading commercial nation of the present day—Great Britain—admits almost all commodities free of duty. The Hanseatic towns, in an age of general exclusion, levied duties ranging from one-half to three-quarters per cent: and Holland for some two centuries, and all through the time of its greatness, kept its ports practically free to the importation of all sorts of merchandise

from all parts of the world. It is somewhat surprising to find that the Turkish empire was the only other European power, till modern times, which kept its ports free for all imports, but the Turkish government spoiled their policy by prohibiting exports! Early in this century, and before England was converted to free trade, the Argentine republic endeavoured to remove all restrictions on importation; but it has now fallen under the influence of American example.

At the present time Great Britain and some of her dependencies, notably India, Hong-Kong, and the Straits Settlements, with Holland and Belgium, are the only examples of an importation generally free.

(b) *Free importation of special articles.* This is nowadays a usual feature even in countries which are strictly protectionist; it is usual to admit free of duty various articles which are expected to be of special advantage to the importing nation. These are included in a "free list" (see FREE LIST). C. A. H.

Free Exports.—As nearly all nations now encourage exportation, not only by refraining from the levy of duties but even by granting bounties, the expediency of leaving export trade generally free may be assumed. The articles on EXPORTS, DUTIES ON, and FREE TRADE will give some idea of the progress of the modern principle, and the cases in which it is still interfered with by duties. It will best be understood by considering the cases of its infraction.

Restraint on Exports.—The idea of prohibiting exports of certain commodities appears to have influenced communities earlier than the attempt to restrain imports. It is based on the idea of preventing—to quote the French statement of it—"all that may contribute to the development of foreign industry."

In the case of England it was first applied in 1261 to the export of wool—the subject of her great original industry. By 8 Eliz. c. 3, and later enactments, severe penalties were imposed on those who exported sheep and wool. But these severe laws failed to attain their end. By 13 & 14 Car. II. 7, hides and leather, by still older statutes, metals, as late as 7 & 8 Will. III. c. 20, instruments of industry, were made the subjects of prohibition. This has all now been reversed for fifty years.

Similar prohibitions, or discouragement of exportation by high duties, were common to most European countries. The French at the end of last century, in the words quoted above, laid down the principle publicly. The Spaniards prohibited the exports of corn up to 1820: Turkey prohibited all exportation till well on into this century. Greece, on her independence, was more moderate, simply imposing a duty of 6 per cent *ad valorem* on all exports. Sicily, in 1839, had recourse to a monopoly to limit the export of sulphur to a fixed annual amount.

The prohibition of the exportation of precious metals rested on a different shade of the idea,

and formed part of the MERCANTILE SYSTEM (*q.v.*), by which they were considered the sole source of wealth to be retained in the country at all hazards.

Prohibition on exportation to an enemy had a somewhat different basis, and still is recognised as perfectly legitimate in the case of munitions of war (see CONTRABAND).

[An excellent summary of the English history will be found in Adam Smith's *Wealth of Nations*, bk. iv. ch. viii.—Art. on BUDGET.—See also Macgregor's *Commercial and Financial Legislation of Europe*, and the works cited under EXPORTS, DUTIES ON.] C. A. H.

IMPORTS, RESTRAINT ON. This is a subject necessarily interwoven with the history of import duties and the theory of trade. The restriction of importation of foreign goods has, in the history of commerce, taken two forms—(1) absolute prohibition, (2) the imposition of heavy duties. It appears to have had its origin in the desire of keeping all production in the hands of the home-producer; and so far it is the ancestor of protection which Mill defines as “the prohibition, or the discouragement by heavy duties, of such foreign commodities as are capable of being produced at home”: it was used later as a punishment to the foreigner. Its correlative is smuggling: when restriction is at its height, smuggling is rife.

It appears to be true that in modern history England was the first prominent example of a restrictive policy: this policy was carried out rather by the NAVIGATION LAWS (*q.v.*) and by complexity of customs laws than by direct prohibition or through the medium of heavy import duties; but as late as 1841 Macgregor (*Commercial and Financial Legislation of Europe and America*) could state that English legislation practically prohibited the importation of corn and of foreign sugars and coffee, and up to a recent date this was true of malt.

It was in France, however, that the use of direct prohibition and of the prohibitive duty was first developed. In 1664 Colbert introduced the principle of excluding foreign manufactures by raising the duties on them: the first absolute prohibitions of foreign commodities—woven clothes from India and the East—became law in 1686. The celebrated commercial treaty of 1786 gave a comparatively easy entrance to English manufactures; but the subsequent wars introduced a complete reversal of this more liberal policy. The episode of the prohibitions based on the Berlin and Milan decrees belongs rather to the story of the war than to ordinary commercial history; but it illustrated singularly well the futility of restrictions on trade: *viz.* the automatic tendency to defeat their own end. In spite of Napoleon's efforts to exclude English manufactures and thus ruin English commerce, these manu-

factures not only found their way into continental markets, but were brought into France with the connivance of the French ministers: “M. de Talleyrand . . . secretly countenanced the landing of British goods solely for the benefit of France” (Macgregor, work cited, p. 38 note). Prohibition remained a leading feature of the French tariff till the treaty of 1860 with England; and of late years French legislation has been retrograding in the old direction by imposing heavy protective duties (see IMPORT DUTIES).

In Spain a definite restrictive policy began almost contemporaneously with that of France, and has hardly ever seen any relaxation. The Spanish tariff, besides hampering trade by its complexity, loaded all foreign imports with duties varying from 50 to 100 per cent of value; and in the middle of the century it contained at least 500 total prohibitions. Holland, after an era of freedom, adopted a few fairly heavy duties in the course of this century, and some actual prohibitions, which were partly political. And, generally, all European nations have been wedded to systems of restraint more or less complete.

The leading modern examples of a restrictive policy are the tariffs of the United States enacted in 1891, 1897, and 1909; it was avowedly a stringent protective tariff, aimed at making the States self-supporting and crushing out foreign competition; its duties amounted in many cases to 50 per cent of the value of the commodity on arrival, and this was sufficient in some articles to cause a complete transfer of the capital engaged in their production from England to the United States.

The evil effects of a restrictive system are (a) its expense to the consumer. Restriction could only be necessary to force a trade out of its natural channel, and that is always expensive. Other bad results appear to be felt more slowly than formerly, for (b) smuggling is more easily checked owing to facility of communication; (c) adulteration and counterfeiting are more difficult because of the general prevalence of minute inspection.

In particular cases evils more far-reaching have been traced, and are doubtless still traceable to restriction. Macgregor in 1841 attributed the heavy drudgery of the peasantry and especially the women in France, and the backwardness of cultivation, to dearth of iron consequent on prohibitions of foreign goods. The prohibition of corn has produced evils more patent still. A good illustration of this point occurred a few years back, when the government of Venezuela was forced to suspend its heavy import duties on food-stuffs owing to complete failure of the home crops.

The accepted opinion of economists is that all restraint on commerce is injurious: the whole theory of free trade is built up on that idea. It would hardly be necessary to refer to this, were it not that List and others have argued that

restriction at an early period of a nation's history is the source of ultimate wealth; and the commercial greatness of England has by some been traced to the self-sufficiency produced by past restrictions on foreign trade—that is, to protection in past ages. These reasoners have neglected the fact of England's geographical position and conformation, her comparatively early political freedom, the early invention of machinery, and other factors.

As regards new countries, however, the system has been in some measure justified by the high authority of Mill (bk. v. ch. x. § 1) (see PROTECTION).

There are certain cases in which the importation of special articles is prohibited or restricted on grounds of public safety or morality: obscene books and prints or dangerous explosives are instances which are common to most modern tariffs. The case of foreign reprints of copyright works—which are prohibited from importation into Great Britain and Ireland and also into the colonies unless certain special arrangements have been made for the benefit of the authors (see 5 & 6 Vict. c. 45, § 17; 25 & 26 Vict. c. 68, § 10), rests on conventional and quasi-moral grounds.

[Ad. Smith, *W. of N.*, bk. iv. ch. ii. and iii.—For facts see John Macgregor's *Commercial and Financial Legislation of Europe and America*, London, 1841.—See also, for America, Edward Atkinson's *Taxation and Work*, New York, 1892.]

C. A. H.

IMPÔT UNIQUE (or SINGLE TAX). The limited and restricted sense in which this term was used by the physiocratic school is best explained by the following quotations from the writings of Quesnay and his followers. "Taxation ought not to be destructive of nor out of proportion to the total income of the nation; . . . it must be levied directly on the net return (*produit net*) of land and not on wages, or on the [gross] produce, in which case it would increase the cost of production, be detrimental to trade, and destroy annually a part of the wealth of the nation" (Quesnay, p. 83, ed. Daire, Paris, 1846, p. 332, ed. Oncken). "Men are not at liberty to assess taxation according to their will; it has an *essential* basis and form settled by the order of nature. . . . Only the portion of crops called the *net product* (meaning after deduction of the outlay made by the agriculturist) should contribute to taxation. . . . Taxation is thus *essentially* a portion of the *net product* of land" (Dupont de Nemours, *Physiocrates*, p. 351, ed. Daire). This system Dupont, in his letters to J. B. Say (p. 405 same ed.), calls a *domanial constitution of finance based on the sharing of returns*. "What is only a portion of a net product can only be taken on a net product; . . . hence the essential form of the tax consists in taking taxation *directly* where it is present" (Mercier de la Rivière, *Ordre Naturel des Sociétés Politiques*, p. 474, ed. Daire). The Abbé Baudeau considers that a share of six twentieths of the *net product* may be allotted to the representatives of the sovereign (*Intro-*

duction à la Philosophie Économique, p. 760, ed. Daire).

Viewed historically, the idea of the single tax is the result of a reaction against the crushing weight of a vexatious and omnipresent system of taxation. In France, as far back as 1576-1577, the states-general of Blois were asked to consider a motion of one of the members of the *Tiers État* to do away with all the existing taxes, and to establish instead an *impôt unique* described as the "*taille égalée*" (equalised tallage), assessed according to the means of the owner of each dwelling; it was in fact a kind of proportional hearth-money, from which, however, the nobility and clergy were to be exempted. This proposition was rejected, probably out of mistrust of the court (Clamagérin, *Histoire de l'Impôt*, ii. pp. 217-219). The system recommended by Vauban in his *Dîme Royale* (republished in Daire's *Économistes Financiers du XVIII^e Siècle*, and *Petite Bibliothèque Économique*) is well known, but was rejected by Mirabeau as "absolutely defective because this excellent man, having disregarded the principle that all wealth and income can only be derived from land, makes a muddle of his scheme by introducing an infinite number of double appropriations" (Knies, *Carl Friedrich von Baden's Brieflicher Verkehr mit Mirabeau*, i. p. 37, Heidelberg, 1892). In Italy, BANDINI (*q.v.*) entertained the same notions in his *Discorso Economico* presented in 1739 to the grand duke of Tuscany.

But owing to the unsoundness and iniquity of its financial system, Spain is the country where the single tax theory took the earliest and kept the most persistent hold both of the official and the speculative mind. Eager to defend the founder of its Austrian dynasty against the aspersions of Spanish writers, Mr. Konrad Haebler, in his *Wirtschaftliche Blüte Spaniens im 16. Jahrhundert* (p. 12), ascribes to Charles V. the first idea of a system of taxation based on the establishment of a single and direct tax. During the decay of the Spanish monarchy under the emperor's successors this idea was resumed under different forms: in 1573-75 and 1592-98, the cortes of Madrid proposed a single tax on grist levied when it left the mills, and this system was advocated at different times either by official bodies or private writers down to the middle of the last century. In 1646, Alcázar de Arriaga, in his *Nueva Declaración de un medio universal para extinguir los tributos en Castilla* (New Declaration of a Universal Plan for Suppression of Taxes), advocated what he denominated the single ALCAVALA, a kind of general income tax of 2 per cent. In 1651 father Bautista DÁVILA proposed a single general and progressive capitation or poll-tax. Centani, however, is more than any one else entitled to be considered as a direct ancestor of the

French physiocrats. In a memorial entitled *Tierras (Land)*, and submitted in 1671 to the king of Spain, Centani, taking up an opinion expressed a few years before by Juan de Castro, explicitly asserts that land is the only real wealth (*la tierra es la verdadera y física hacienda*), and insists on the removal of all indirect taxation in favour of a direct and territorial taxation founded on an exact and extensive CADASTRAL SURVEY. About half a century later, the minister ENSENADA gave orders to proceed with this survey in Castile on a plan which had been successfully carried out in Catalonia; and in 1770, Charles III. decreed the "*única contribucion*," which was, however, never actually put into force (Colmeiro, *Hist. de la Ec. Polit. en España*, ii. pp. 570-576).

In Baden, the margrave Carl Friedrich, prompted by purely theoretical views, decreed a similar experiment in three villages—Dallingen (district of Pforzheim), Bahligen, and Theningen (district of Hochberg). Established in the years 1770 and 1771, it by degrees excited the discontent of the population, was gradually abandoned, and came to an end about the beginning of the present century. A good and clear account of this experiment is given in Conrad's *Jahrbücher für Nationalökonomie u. Statistik*, 1872, vol. xix. (article by Emminghaus, C. F. von Baden's *Physiocratische Verbindungen*. See also Rodolphe Reuss, *Ch. de Butré*, Strasbourg, 1890).

In France, although the physiocratic doctrines always remained confined to theory, their influence may be traced in the steady aversion to indirect taxation of the representative assemblies at the time of the revolution of 1789. But after the space of a very few years, this aversion had to be overcome, for whatever may be its theoretical merits, no system of single taxation could possibly satisfy the ravenous appetites of our modern budgets.

[In addition to the works mentioned before, see Mirabeau's *Théorie de l'Impôt* (1761), various writings by Turgot collected by Daire in his edition under the heading of *Impôt* (vol. i. pp. 392-434), and Turgot's *Réflexions sur la Formation et la Distribution des Richesses*, in the first volume of *Mélanges* (ed. Daire).—Condillac, *Le Commerce et le Gouvernement* (pp. 355-359), also Cantillon, *Essai sur la nature du Commerce*, 1755 (pp. 55-61, Harvard reprint, 1892).—Saint Péray, *Mémoire sur les Effets de l'Impôt Indirect* (1768), etc.

Among the opponents of the tax are Voltaire, *L'homme aux Quarante Écus*.—Forbonnais, *Principes Économiques* in Daire's *Mélanges* (p. 235 note, and p. 210, notes 1 and 2).—Mably, *Doutes proposés aux Économistes sur l'Ordre Naturel des Sociétés Politiques* (Paris, 1768, pp. 40-44).—GRASLIN (q.v.), *Essai Analytique sur la Richesse et sur l'Impôt* (London, 1767).—Rivière, *L'Ami de la Paix ou Réponse à la Théorie de l'Impôt du Marquis de Mirabeau* (1761).—Champalain, *Taxe Personnelle et Unique* (1789).—Guiraudet, *Erreur des Économistes sur l'Impôt* (1790).

Consult also the valuable article by Dr. Stephan Bauer (*Zur Entstehung der Physiocratie* in Conrad's *Jahrbücher für Nat. Oek. u. Statistik*, Jena, 1890) and Professor A. Oncken (*Zur Geschichte der Physiocratie* in Schmoller's *Jahrbuch für Gesetzgebung*, Leipzig, 1893).] E. ca.
(See EPHÉMÉRIDES; PHYSIOCRATS; SINGLE TAX.)

IMPOUND. An expression originally used in respect of distrained cattle only, which were placed into a "pound" by way of security. It is now used generally with respect to any objects which, with some ulterior purpose, are put into a place of security. Thus a judge may order documents to be impounded if he thinks they may furnish material for a criminal prosecution. As to the way in which such documents are to be dealt with, see Rules of the Supreme Court, Order 42, Rule 33A. E. S.

IMPRESSMENT. From the earliest times every free and able-bodied Englishman has been liable to military service, but only for purposes of defence. The service of the primitive FRYN, and of the later militia, was restricted to putting down rebellion and repelling invasion. The sovereign could not lawfully claim the service of the subject for the purpose of manning the fleet, or of forming armies to serve abroad. But voluntary enlistment did not always furnish men enough for these purposes. The Tudors and Stuarts, therefore, had recourse to impressment. Impressment may be defined as an irregular and arbitrary compulsion to serve. It differs from the modern CONSCRIPTION, which is also compulsory, but imposes uniform and definite liabilities either on the whole population or on large classes of the community. In England, sailors were liable to be pressed for naval service (see ALEXANDER JUSTICE), and men of the lower classes generally were liable to be pressed for military service. The impressment of sailors for the navy fell upon so limited a class, and was so convenient as a means of securing the national safety, that in spite of the gross abuses which it involved, it was maintained down to the close of our great naval wars, and never elicited a serious protest either from the courts of law or from parliament. It was otherwise with impressment for military service. The hardships which it involved affected a much greater number of persons, and the military strength which it lent to the crown provoked the jealousy of the friends of constitutional freedom. The impressment of soldiers by Charles I. in the course of his conflict with the Scotch people led to the statutory declaration made in 16 Car. I. c. 28, that no subject ought to be impressed, or compelled, to go out of his country to serve as a soldier except in case of the sudden coming of strange enemies into the kingdom. But parliament regarded impressment as necessary upon occasion, for by this very act it sanctioned the pressing of soldiers to serve in the Irish war. Several acts of parliament in the course

of the last century sanctioned the pressing of vagrants, and of idle or disorderly persons. Since 1780 impressment of soldiers has been virtually unknown. Impressment of sailors became unnecessary after the close of the French wars, but has never been declared unlawful. Should voluntary enlistment hereafter fail to supply the needs of the army and navy, recourse will probably be had to some scheme of conscription. The old impressment was inequitable in principle and brutal in execution. Much may be said for the policy of recruiting the army from the least valuable class of citizens. But the pressing of vagrants and disorderly persons would be a feeble resource now that the size of armies has been so much increased.

[See Clode, *Military Forces of the Crown*.—Anson, *Law and Custom of the Constitution*.—Captain Marryat, R.N., *Suggestions for the abolition of the present System of Impressment in the Naval Service*, 1822.—*Edinburgh Review*, Nov. 1814.] F. C. M.

IMPREST in public accounts denotes an advance to a sub-accountant or individual, usually from an authorised vote, to be accounted for in detail after expenditure. C. A. H.

IMPRISONMENT FOR DEBT. See DEBT, IMPRISONMENT FOR.

INCOME may be defined as the wealth, measured in money, which is at the disposal of an individual, or a community, per year or other unit of time. This term is not easily freed from ambiguity. Does wealth imply materiality; as Mill decides in a passage (*Pol. Econ.*, bk. i. ch. iii. § 2) which has been severely criticised by Mr. Cannan with reference to that kind of wealth which constitutes income (*Production and Distribution*, p. 31). The attribute in question may seem to be the only logical ground for a distinction which has been drawn by high authorities: by DUDLEY BAXTER (*National Income*, ch. viii.) between "original earnings," namely, "the productive income from agriculture and manufacture," and the "second-hand income" "paid out of original earnings"; and by Leone LEVI (*Report of the British Association*, 1881, p. 274), between "income derived from independent sources of production" and an opposite kind including "professional incomes which really constitute the expenditure of other classes." Can "original" and "independent" here mean anything but *material*? Probably it is best not to take this distinction, and to understand the "aggregate of commodities material and immaterial, including services of all kinds," (Marshall) which have the character of wealth.

Among such objects a distinction is drawn between those which commonly fetch a price and those which, though exchangeable, are not commonly exchanged. If a mother hire another woman to watch her baby while she herself works at a factory, the amount of paid services

is greater than it would be if the mother attended to her home and the other woman worked in the factory. But the "aggregate of commodities" may well be less. So "no account is commonly taken of the benefit he [a man] derives from the use of his furniture" (Marshall). The distinction between *possibly exchangeable* and *actually exchanged* must be attended to when we compare incomes in widely different states of society in one of which many gifts of nature are free, in another, appropriated. The difference between the "luxuries, conveniences, and necessities" enjoyed by the English labourer, now and in the age of the Tudors, cannot be calculated from the difference in the respective money-incomes.

Next, what is meant by "at disposal," or the term which some would prefer, "net"? It excludes that portion of incomings which is required to keep up capital, and other outgoings. Are we then to exclude from the income of the labourer the expenditure which is necessary for his efficiency? This view is taken in a masterly report on the *Common measure of value in direct taxation*, by a committee of the British Association, which included Farr and Jevons and Newmarch (*Report of the British Association for 1878*). They say: "As the horse has to be clothed and stabled, so the productive labourer has to be clothed and housed." But there is this difference, that the cart-horse's food and gear are not "goods of the first order," objects of human consumption.

Again, among outgoings, should we place that portion of earnings which forms compensation for *désagréments*? If the trade of a butcher "is in most places more profitable than the greater part of common trades" only because it is "an odious business" (Adam Smith), should we say that the real net income of the butcher is the same as that of his neighbour in a common trade?

The preceding ambiguities are common to individual and social income (which is the sum of the incomes of individuals); the following is peculiar to social income: "Is the richness of a nation to be measured by the aggregate money-income of its inhabitants, or by their average income"? Prof. Marshall, who asks this question, suggests that "a rough notion of the economic strength of a nation . . . may be got by multiplying the aggregate income of its inhabitants by their average income."

It is fortunate that some of these difficulties disappear when the object is only to compare the incomes of different nations, or of the same nation, at different epochs. If the compared incomes are calculated on a uniform though imperfect plan, the ratios between the results are apt to be trustworthy (cp. Nicholson's *Principles of Political Economy*, p. 216); provided that account is taken of differences in the value of money. An example of the latter

correction is afforded by Sir R. Giffen's estimates of the growth of capital, which are based upon the growth of income.

[The most philosophical treatment of the subject known to the writer is to be found in Prof. Marshall's *Principles* in the chapter on "Income" (bk. ii.), and the sections relating to "National Dividend" (see Index). See also preface to 3rd edition. The statistics in the other works which have been referred to also deserve attention.] F. Y. E.

INCOME TAX IN THE UNITED KINGDOM.

History, p. 375; Scope of the Tax, p. 375; Basis of Charge, p. 376; Exemptions, p. 376; Inequalities, p. 377; Differentiation, p. 377; Graduation, p. 377; Incidence, p. 378; Rate and Yield, p. 378.

History.—It was only during the 19th century that a general income tax, imposed alike on profits derived from property, from trade and commerce, and from personal exertions, has become a normal method of levying taxation. In England a graduated tax, sometimes called an income tax, was levied in 1435 and again in 1450, but these taxes, as Thorold ROGERS points out, fell short of the scope of a general income-tax, being levied only on those who possessed fixed sources of personal revenues (*Economic Interpretation of History*, p. 130; see also Dowell's *History of Taxation*, vol. i. pp. 112 and 116). In the reign of Henry VIII. taxes levied on earnings were imposed, but unsuccessfully, and from this time until the close of the 18th century no further attempt seems to have been made to levy a general income-tax.

Even under the great strain on our finances caused by the French war, it was with reluctance that W. PITT made, in 1798, the great experiment of imposing a general income-tax, and he only did so after the failure of his attempt to arrive indirectly at the taxation of income by means of his celebrated plan of the TRIPLE ASSESSMENT (*q.v.*). The income-tax imposed by Pitt was repealed on the conclusion of the Treaty of Amiens; but the tax was reimposed within a year by Addington, and remained in force until the end of the war. In 1842 Sir Robert PEEL revived the tax to enable him to introduce fiscal reforms, and to improve the commerce and manufactures of the kingdom. It was intended that the revival should only be temporary, but the tax had now ceased to be a war-tax, and since 1842 it has maintained its place as one of the recognised means of meeting ordinary expenditure. In 1853 the area of the tax, which had previously been confined to Great Britain, was extended to include Ireland.

On one occasion only since 1842 has a serious proposal been made for the immediate repeal of the tax. On the dissolution of parliament in 1874, the prime minister (Mr. Gladstone) in a manifesto to his constituents announced his view that the circumstances of the time rendered it practicable to confer on the country

the advantage and relief of the total repeal of the tax, which it had been the "happy fortune" of Mr. Lowe to reduce from 6d. to 3d. But on the re-assembling of parliament, Mr. Gladstone's government found themselves in a minority and resigned. Their successors retained the tax, reducing it however to 2d., the lowest rate at which it has ever stood. If the proposed repeal had been effected, chancellors of the exchequer would have been deprived of the most elastic of taxes, by the aid of which it is always possible to balance a budget; and it is difficult to see how the expenditure of subsequent years could have been met without reviving the tax.

Scope of the Tax.—The Income Tax Acts charge with duty income derived from every source in the United Kingdom, whether the person to whom the income accrues resides in the United Kingdom or abroad; and also income received in the United Kingdom by persons residing in this country from foreign or colonial sources. The duties are ranged under five schedules of charge (16 & 17 Vict. c. 34, § 2) as follows:

Schedule A imposes a duty on the owners of lands and houses in the United Kingdom. *Schedule B* on the occupiers of lands in the United Kingdom. *Schedule C* on annuities, dividends, and interest payable in the United Kingdom on government securities, British, colonial, or foreign. *Schedule D* on annual profits arising to persons residing in the United Kingdom from any kind of property wheresoever situate, or from any profession, trade, employment, or vocation wheresoever carried on; on annual profits arising to persons not resident in the United Kingdom from property situate, or from any profession, trade, employment, or vocation exercised, in the United Kingdom; and on interest of money, annuities, and other annual profits and gains. *Schedule E* on income derived from public offices or employments of profit, and on annuities, pensions, or stipends payable by Her Majesty or out of the public revenue of the United Kingdom. These familiar schedules of charge had their origin in 1803. The tax imposed by Pitt was levied on a general return made by each taxpayer of his income from every source. But in 1803 the present system of charging income-tax upon all property and profit at their first source was introduced, with the twofold object of reducing the temptations to evasion, and of preventing unnecessary disclosure of the amount of the total income of the taxpayers. It is to the adoption of this system that the success which has attended the administration of the English income-tax is mainly due. The duty charged on lands and houses is collected from the occupier, who is empowered, on payment of his rent, to deduct the duty applicable thereto; and the landlord in turn is entitled to deduct a proportionate

amount of duty from any ground rent, annuity, rent charge, interest, or other annual sum secured on the property. In like manner the profits derived from a trade or business are assessable in one sum on the company, firm, or person carrying on the concern, and the burden is distributed amongst the persons who are entitled to share in the profits, or to receive dividends, interest, or other annual payments thereout, by deduction of a proportionate amount of duty from each such payment. Dividends and interest payable out of untaxed sources, by the agents in England of foreign or colonial governments or companies, are charged in the hands of such agents; and, wherever practicable, provision is made for the assessment of the tax on distributors of profits, who have no personal interest in escaping payment, instead of on the ultimate recipients. The produce of the tax in 1803 under this system, at the rate of 5 per cent, was almost equal to the produce of the 10 per cent duty levied in 1799 upon the general returns of the individual taxpayers.

Basis of Charge.—Assessments under Schedule A on lands and houses are based in Great Britain on the rack-rental value of the property, subject to the deduction of land tax and certain other public burdens imposed by law on the owners; in Ireland on the poor-law valuation, subject to reduction in cases where such valuation exceeds the rental value. Until 1894 no allowance was granted in respect of the cost of repairs, insurance, and other expenses incidental to the maintenance of the property in a condition to command its existing rent. But the Finance Act 1894, which equalised the death duties chargeable on realty and personality, also made provision for the reduction of the income-tax assessment on the gross value of lands and houses under Schedule A by a sum equal in the case of lands to one-eighth, and in the case of houses to one-sixth, of the assessment. Under Schedule B the farmer is charged on one-third of the annual value of his land, on the assumption that his profits may amount to one-third of his rent. Dividends and interest chargeable under Schedule C, and the salaries of offices chargeable under Schedule E, are assessed on the actual amount receivable within the year. Under Schedule D assessments are based on an estimate arrived at by taking, in some cases, the average profit for the three preceding years, in others, the profits of the preceding or the estimated profits of the current year. Mines are assessable under Schedule A, but according to Schedule D on the average profits of the five preceding years; and quarries, ironworks, gasworks, waterworks, railways, etc., on the profits of the year preceding. Relief is allowed at the end of the year when the profits have diminished.

Exemptions.—Of the exemptions from duty

granted by the Income Tax Acts, by far the most important are those in favour of persons with small incomes. The extension of these exemptions has been a marked feature of the income-tax legislation of recent years. When Pitt introduced the income-tax in 1799, he exempted persons whose incomes were under £60, and imposed lower rates on incomes under £200. Subsequently, these exemptions were withdrawn entirely in the case of incomes from realised property; whilst in the case of profits from professions, trades, and offices, the limit of exemption was reduced to £50, and of partial relief to £150. On the revival of the tax by Peel in 1842, exemption was granted to persons whose total incomes from whatever source derived were under £150. This relief was somewhat curtailed in 1853, when Mr. Gladstone introduced an act which exempted incomes under £100, and imposed a reduced rate of duty on incomes between £100 and £150. The limit of exemption was again raised in 1876 to £150 by Sir Stafford Northcote (Lord IDDESLEIGH), and in 1894 to £160 by Sir William Harcourt, whilst the range of abatement was extended under successive Chancellors of the Exchequer (Mr. Gladstone in 1853, Mr. Lowe (Lord SHERBROOKE) in 1872, Sir Stafford Northcote in 1876, and Sir William Harcourt in 1894), until in 1898 Sir Michael Hicks-Beach (now Viscount St. ALDWYN) introduced the present scale, under which incomes not exceeding £400 receive an allowance of £160; not exceeding £500, £150; not exceeding £600, £120; and not exceeding £700, £70. In 1909, £10 was allowed for each child under sixteen, provided total income did not exceed £500. Earned income was charged 9d. up to £2000, and a supertax on excess over £3000 when the income is £5000 or over. Relief has been defended as exempting the wages of labour. To avoid anomalies which would arise if the tax came into full operation at any given point, it has been thought better to graduate the transition. The relief given has also been defended on the ground that it tends to correct the inequality which arises from the greater proportional pressure of the taxes on articles of consumption on persons with small incomes. The Income Tax Acts also grant exemptions in favour of the public buildings of any college or hall in the universities, or of any hospital, public school, or almshouse; of income legally applicable and applied to charitable purposes; and of the property and income of registered friendly societies. Savings banks, industrial and provident societies, and the provident funds of trade unions are also entitled to a certain measure of relief. The exemption in favour of payments for life insurance, and of payments to secure deferred annuities, is especially note-

worthy. It is of course a partial exemption in favour of savings, and was introduced by Mr. Gladstone in 1853, admittedly as a concession to the general feeling that a man ought to have at any rate the opportunity of investing his savings without being liable to income-tax upon them (*Hansard*, vol. 125, p. 1385). The deduction under this head is restricted to a sum not exceeding one-sixth part of the assurer's chargeable income.

Inequalities.—The income-tax has been much criticised, especially in its earlier years, on the ground of its inquisitorial nature and of the alleged inequality of its incidence. Unfortunately an income-tax which entirely ceased to be inquisitorial would in great measure cease to be effective; but in England this objection has been minimised as far as possible by the assessment of income at its first source in the manner already described. The inequalities of the income tax have been much discussed both in and out of parliament, and the whole subject was thoroughly investigated by the select committees appointed for the purpose in 1851-52 and 1861. One of the main objections formerly alleged against the tax was that no allowance was granted from the assessments upon lands and houses in respect of the portion of the rent which was not available as income, being applied to the maintenance of the property in insurance and repairs. This defect has been remedied by the Finance Act 1894, not indeed by the allowance of the actual outgoings in each individual case, which would involve immense difficulty and friction, but by an all-round deduction calculated to do substantial justice in the great majority of cases. Other objections raised against the scheme of the tax were that it charged savings as well as expenditure; that it taxed all incomes at the same rate, whether they were permanent or temporary, spontaneous or earned; and that capital was sometimes taxed as well as income, as in the case of (1) capital given as the consideration for annuities for years or life, which is taxed in the annuity through which it is being repaid with interest, and (2) capital in the course of realisation through the working of mines, which is taxed in the assessment of the entire value of their produce. The committee of 1852 separated without being able to agree in any recommendation, and contented themselves with merely reporting the evidence taken. But the committee of 1861 arrived at the conclusion that no plan had been proposed to them which afforded a basis for a practicable and equitable re-adjustment of the income tax, and that the objections urged against it were objections to its nature and essence rather than to the particular shape which had been given to it.

Differentiation.—In recent years, however, the proposal to impose differential rates of duty

under which industrial incomes shall be taxed more lightly than spontaneous incomes has been once more revived. The principle of a differential income tax has received the powerful support of J. S. MILL (*Principles of Political Economy*, bk. v. ch. 2, § 4). Mill would have preferred, if it were possible, to tax only the part of income devoted to expenditure, exempting that which is saved; on the ground that unless savings are exempted, the contributors are twice taxed on what they save, and only once on what they spend. But he considered that "if no plan can be devised for the exemption of actual savings, sufficiently free from liability to fraud, it is necessary, as the next thing in point of justice, to take into account in assessing the tax what the different classes of contributors ought to save. And there would probably be no other mode of doing this than the rough expedient of two different rates of assessment. There would be great difficulty in taking into account differences of duration between one terminable income and another; and in the most frequent case, that of incomes dependent on life, differences of age and health would constitute such extreme diversity as it would be impossible to take proper cognisance of." Fawcett (*Manual of Political Economy*, bk. iv. ch. 2) discusses the question at some length. He allows that the income tax ought not to be levied at a uniform rate, if the principle is admitted that each single tax should be so adjusted that every individual should contribute to it in proportion to his ability. He points out, however, that this is impossible in the case of other taxes, and considers that equality of taxation can be best secured, not by botching and patching each single tax, but by contemplating the revenue as a whole. After reviewing some of the obstacles to any attempt to levy the income tax in such a way that each individual should contribute to it in proportion to his means, he adopts the conclusion that the present method of levying the tax cannot with advantage be changed. And this is the view which has been taken by our greatest financial statesmen. Disraeli (Lord Beaconsfield), when he was for the first time chancellor of the exchequer in 1852, unsuccessfully proposed to introduce a differential tax, but he did not afterwards repeat the attempt. On the other hand Pitt, Peel, Gladstone, and others have resisted the introduction of a differential duty. On one of these occasions Mr. Gladstone said (*Hansard*, vol. 169, p. 1838), "Mr. Pitt and Sir R. Peel have both considered this question, and have both left the tax as a uniform income tax, not indeed as the image of perfection in our fiscal system, but as that form on which, as wise, prudent, and practical men, they found it necessary to take their stand."

Graduation.—Another important question in

relation to the income tax is that of graduation. The relief granted to incomes not exceeding £700 constitutes a substantial graduation of the duty in the case of the majority of the persons who fall within the scope of the tax. But in some quarters the opinion is held that the tax should be graduated not only degressively but progressively. The question of progressive taxation has been dealt with elsewhere (see GRADUATED TAXATION). Here it will suffice to mention that there are grave practical difficulties in the way of applying the principle of progression to the income tax. It certainly would not be worth while to abandon the system of assessing income at its source in order to impose higher rates of duty on the larger incomes; and even if the progressive duties were levied by a separate supplementary assessment, it would be impossible to prevent considerable evasion, and the procedure and penalties necessary to ensure a tolerable degree of accuracy would probably be regarded as very harsh and inquisitorial.

Incidence.—The English income tax is a combination of taxes on rent, profits, and wages, and its incidence is the same as that of separate taxes on those sources of income respectively (see TAXATION, INCIDENCE OF). Baskin (*Public Finance*, p. 436) says: "Taxes on rents, on the higher kinds of wages, or on employers' gains, are not easily shifted. Even in the case of interest, unless the growth of capital is checked, a tax tends to remain on the payer. Therefore speaking broadly we may say that the shifting of an income tax is not to be expected, and in the rare cases where it does happen, is brought about, either by a check in the growth of capital through diminished interest, or by disturbances in the relations of the several industries and trades through its action." And Seligman (*Shifting and Incidence of Taxation*, p. 179) says: "The tax on economic rent and net profits cannot be shifted, so that for all members of the community, except the wage earners, an income tax levied on pure income would indeed tend to stay where it is put. And in so far as the lowest incomes are exempted from the tax, the tendency would also be for the income tax on the labourer to stay where it is put."

Rate and Yield.—The income tax is imposed annually at rates varying according to the financial requirements of the year. The war tax of the early part of the 19th century was levied chiefly at the rate of 2s. in the £. In 1842 the tax was imposed at the rate of 7d. in the £, and so remained for twelve years. It has varied greatly since, touching its highest point (1s. 4d. in 1855 and 1856) during the Crimean War, and its lowest, 2d., in 1874 and 1875. From 1888 to 1892 it stood at 6d., but rose to 7d. in 1893, and 8d. in 1894. The following table gives the rate and yield of the tax at decennial intervals since 1842.

Year.	Rate.	Net produce.	Yield per penny.
1842-43	7d.	5,405,161	772,166
1852-53	7d.	5,670,030	810,004
1862-63	9d.	10,731,673	1,192,408
1872-73	4d.	6,964,853	1,741,088
1882-83	6½d.	12,758,661	1,962,871
1892-93	6d.	13,439,300	2,239,856
1902-03	1s. 3d.	38,037,931	2,535,862
1906-07	1s.	32,002,412	2,666,867

[Robinson, *Laws relating to the Income Tax*, 1895.—Dowell's *Income Tax Laws*, 5th ed. 1902.—Ellis's *Income Tax Acts*, 3rd. ed. 1893.—Pratt's *Income Tax*, by Redman, 1904.—Dowell's *History of Taxation and Taxes in England*, 2nd. ed. 1888.—Cobden, *Speeches, etc.*, 1878. Annual reports of Commissioners of Inland Revenue, especially 1857, 1870, and 1885. Reports of Committees on Income Tax 1851-52, 1861, and 1905.] E. E. N. B.

INCOME-TAX ON THE CONTINENT OF EUROPE.

Austria, p. 379; Bavaria, Wurtemberg, and Mecklenburg, p. 379; Germany, Prussia, and North German States, p. 378; Holland, p. 379; Italy, p. 379; Switzerland, p. 379.

Continental writers use the equivalents of the word "income-tax" (*Einkommensteuer*, *impôt sur le revenu*, *imposta sui redditi*) to designate a tax levied on individuals in respect of the whole of their income; the taxes which are deducted from income as it arises, or levied on the objects from which income is derived, are generally designated by other names (*e.g.* *Ertragsteuer*). Taxes of the first kind are, as a rule, included by scientific writers among "subjective" taxes, whilst the last-mentioned taxes are called "objective." The rate of income-tax in most continental countries is not adjusted from year to year according to the position of the budget, but is fixed once for all by statute.

Some kind of income-tax exists in Germany, Austria, Switzerland, Italy; in France the tax called "*personnelle mobilière*" could not be called income-tax in any sense, and the proposal of a regular income tax has hitherto not met with success. [For position of income-tax in France, see Appendix.]

The principal characteristics of continental income-taxes will appear from the following statement:

1. *Germany.*—The empire has no direct taxes of any kind, but the individual states have income-taxes of some sort. They may be divided into three groups:

(a) *Prussia.*—Up to a recent period Prussia had a general income-tax, and certain additional objective taxes, viz. taxes on revenue from land, buildings, and trades. The latter, since the 1st April 1895, have been transferred to the local authorities. The central government now receives a general income-tax, that is, a tax on the whole income of each individual. The tax

is progressive, and rises by steps from about $\frac{2}{3}$ per cent to about 4 per cent. In addition to the general income-tax, there is a tax on income from funded property, which is a complementary tax (*Ergänzungsteuer*) intended to give an advantage to income derived from productive employment. It is levied on the capital value on the whole of each person's real and personal property (not including furniture and movable goods not attached to land, or used as plant for purposes of trade), and is about $\frac{1}{10}$ per cent of the assessed value of the capital which, taking the average return on capital to be 4 per cent, is equal to about $1\frac{1}{4}$ per cent on the income. The Prussian laws relating to income-tax and complementary tax are dated respectively 1891 and 1893; the latter did not come into force until the 1st January 1895.

(b) The other *North German States* (excepting *Mecklenburg*) and the *Grand Duchies of Baden* and *Hesse* have a general income-tax, and some additional objective taxes.

(c) *Bavaria*, *Württemberg*, and *Mecklenburg* have no general subjective income-tax, but a number of objective taxes, viz. taxes on income from land, from buildings, from trades, and from investments. *Bavaria* has a partial income-tax, intended to affect incomes not coming under the above heads, viz. income from (i) wages below $1\frac{1}{2}$ marks per diem; (ii) professions and farming; (iii) wages above $1\frac{1}{2}$ marks per diem, and salaries. In the first-named class the tax is a fixed amount for each person; in the second class the incomes are sub-divided into categories, each charged with a fixed rate varying from $\frac{1}{3}$ per cent to 1 per cent; in the third class the tax is progressive, the first 1020 marks of each income pay $\frac{1}{3}$ per cent, the next 510 marks $\frac{2}{3}$ per cent, and the rest of the income pays 1 per cent. *Württemberg* has also a similar partial income-tax.

2. *Austria* has a very complicated system. There is no general income-tax. The tax on revenue from land and from Austrian investments is generally deducted at the source. There is no tax on income from foreign investments, and Austrian loans are frequently issued as bearing interest free of income-tax. There is an assessed income-tax on (a) income derived from trade, small traders being exempted; (b) income derived from professions, salaries, and wages, workmen and domestic servants being exempted; (c) income from interest on loans from which the tax is not deducted on payment, and which is not exempted from tax. The tax on income from trades and on interest is 5 per cent, but traders are also subject to an objective tax; the tax on income from professions and salaries is progressive, and rises from 1 per cent to 10 per cent. Additions are made to the regular tax according to the financial requirements of each year, and as they have of

late amounted to 100 per cent of the regular tax, the rates seem very high. It appears, however, that the authorities are very lenient in respect of the assessments, and only government officials, whose tax is deducted from their salaries, are the sufferers.

3. *Switzerland*.—In the Swiss cantons there is generally a property-tax, assessed on the capital value of all funded property, but the value in many cases is assigned on the basis of annual income. In addition to this property-tax, most cantons have a supplementary income-tax, which affects income not derived from taxed property. In *Basel-stadt* and in *Basel-land* there are general income-taxes in addition to the property-taxes; but in *Basel-land*, interest derived from invested capital is exempted from income-tax.

4. *Italy*.—All income, except income derived from land, is subject to a general income-tax, which, however, is deducted at the source in respect of dividends and interest on investments, payable in Italy, and salaries. The tax amounts to $13\frac{1}{2}$ per cent, but the various kinds of incomes are differentiated in the following manner: (a) income from investments is assessed at the full amount; (b) income derived partly from capital and partly from work, such as income derived from industry or trade, is assessed at $\frac{2}{3}$ of the full amount; (c) income derived exclusively from work, such as professional income, income derived from salaries or wages, not coming under the next head, is assessed at $\frac{2}{3}$ of the full amount; (d) income received in respect of salary by government, provincial, or municipal officials, is assessed at $\frac{1}{2}$ of the full amount. Special rules are applicable to farmers, and there is an elaborate system of exemptions and deductions in respect of smaller incomes.

5. *Holland*.—Recent legislation (1892-93) has introduced a system by which income from funded property is more heavily taxed than other income, though the distinction is not as marked as in Prussia. A property tax is charged on the surplus value of a person's real and personal property over 10,000 florins (property, the value of which does not exceed 13,000 florins, being exempt, and real property not being assessed at its full selling value). This tax rises from $\frac{1}{2}$ per cent to $\frac{1}{3}$ per cent, and—on the basis of an annual return on capital of 4 per cent—is equivalent to a tax on income rising from 1 per cent to 5 per cent; there is also a tax on income not derived from property, which rises from 2 per cent to $3\frac{1}{2}$ per cent (incomes not exceeding 650 florins being exempt).

[See articles "Einkommensteuer," and "Vermögenssteuer," in *Handwörterbuch der Staatswissenschaften*, and the works therein referred to; see also Wagner, *Finanzwissenschaft*, vol. ii.—Roscher, *Finanzwissenschaft*.—Meyer, *Deutsches Verwaltungsrecht*.—Bastable, *Public Finance*,

1892.—Greven, "Fiscal Reform in Holland" (*Econ. Journal*, vol. iii. p. 534). E. S.

INCOME TAX IN THE UNITED STATES.

An income tax was levied by the act of Aug. 5, 1861, as part of the extraordinary financial legislation to supply revenue for carrying on the civil war. Incomes over £160 were taxed 3 per cent. The rates were increased by subsequent legislation, and incomes under £200 exempted. The tax dropped in 1872. The largest amount collected in one year was in 1866, \$72,982,159 (£14,596,432), or about 14 per cent of the net ordinary receipts. The tax was never regarded with favour, and when a 2 per cent income tax with an exemption of £800 was included in the Wilson Bill, 1894, it was declared unconstitutional and withdrawn. An income tax is levied in a few states for local purposes, as in Massachusetts, on all professional incomes above £400, and in Pennsylvania on certain businesses.

[For the federal income tax, see *Reports of Commissioners of Internal Revenue*; and for local income taxes, consult index in Ely's *Taxation in American States and Cities*.] D. R. D.

INCONVERTIBLE CURRENCY (see **IDEAL MONEY**). Inconvertible is predicated of paper money for which coin is not obtainable on demand. A paper currency may become inconvertible by a suspension of specie payments, such as the English bank restriction (see **BULLION COMMITTEE, REPORT OF**); or it may be inconvertible from the first, like the French **ASSIGNATS**. It often purports to be based upon, or to "represent" real wealth,—for instance in Pennsylvania last century there was a paper currency based upon the security of land, "coined land" (Franklin), and in Connecticut taxes were assigned for the redemption of the paper.

The value of an inconvertible paper currency depends upon circumstances common to all kinds of money, namely the quantity and efficiency of the circulation compared with the volume of transactions; and circumstances peculiar to this kind of money, namely that the supply is not regulated by cost of production, that the demand is limited to a particular country, and varies according as the currency is received by the people with more or less distrust.

From these peculiarities we may judge of the use of an inconvertible currency. The advantage of dispensing with a reserve of precious metal—an advantage which may be very great in time of emergency such as war—is counterbalanced by the danger of depreciation through over-issue. This danger has often proved fatal: e.g. the French assignats which were depreciated to nearly $\frac{1}{100}$ (White), or even $\frac{1}{1000}$ (Macleod), of their face value; and the American "continental currency," which was depreciated to $\frac{1}{100}$ (Walker). But this danger may be avoided by caution. The notes of the Bank of France were depreciated upon suspension of payment in specie by only two or three per

cent during the revolution of 1848, and scarcely by $1\frac{1}{2}$ per cent during the war of 1870,—differences hardly appreciable in practice.

The value of an inconvertible paper money is liable to fluctuate from the absence of that automatic regulator which the foreign exchanges constitute in the case of convertible paper, and also from variations in popular confidence. A remedy for the evil of fluctuation—as well as that of depreciation—is afforded by the rule that the market price and the mint price of bullion should be the same (see **DEPRECIATION**). But the remedy may appear imperfect to those who hold that a suspension of payment tends to depreciate not only the value of notes in relation to gold, but also that of gold in relation to commodities—an opinion which has been disputed by Tooke and entertained by Walker (Tooke, *History of Prices*, pt. iii. especially ch. i., and summaries to the other chapters; Walker, *Money*, ch. xvii.). An ideally more perfect method of regulating an inconvertible paper currency would be to make its value correspond to a **TABULAR STANDARD**. A paper so regulated would have an advantage in point of stability over the precious metals. But the realisation of this idea is utopian.

[The subject is treated in almost all the general works on political economy and those of which the special subject is money. Mill's chapter on inconvertible currency (*Pol. Econ.*, bk. iii. ch. xiii.) leaves little to be desired except the idea of a standard other than the precious metals for testing the depreciation of paper money. This idea is supplied by Professor F. A. Walker in his *Money*, together with much interesting historical matter and numerous references (see also **INFLATION**).] F. Y. E.

INCORPORATION OF COMPANIES. Companies may be "incorporated" (invested with the rights of corporate bodies) by special act of parliament, by royal charter, or under the Companies Acts. The first-named method of incorporation is usually adopted in the case of railway, canal, and similar companies: the second has become exceptional, the incorporation under the companies acts being now most frequently resorted to. The Companies Act 1862, § 18, provides that upon the registration of the memorandum and—where necessary—of the articles of association, the registrar of joint-stock companies is to issue a certificate of incorporation, and that thereupon a company is to become capable of exercising all the functions of an incorporated company. As the memorandum and articles are complete on being signed by seven members, whose holding may be restricted to a merely nominal amount, it will be seen that the incorporation of a company does not in any way prove that it has any substantial existence. Under Companies Act 1900, § 6, a public company, though incorporated, is not entitled to commence business until cer-

tain specified requirements have been complied with.

E. S.

INCORPOREAL PROPERTY. The legal distinction between things corporeal and incorporeal first appears in the Roman system. "Corporeal things are those which by their constitution admit of being handled, such as land, a man, clothing, gold, silver, and in a word numberless other things. Incorporeal things are those which cannot be touched, such as those which have only a legal existence, like an inheritance, a usufruct, or obligations however contracted" (*Institutes of Justinian*, bk. ii. pt. ii.). An inheritance in Roman law, it must be remembered, meant the sum total of the proprietary rights and liabilities of a person deceased. This legal distinction was itself derived from a philosophical distinction made by the Stoics between objects of sense and objects of the intelligence. But it involves a confusion of thought. For it is clear that the corporeal things of Roman law are the objects of rights and liabilities, whilst the incorporeal things are rights or liabilities themselves. In the English law of real property the distinction between things corporeal and incorporeal is used in a still more arbitrary way. Lands and houses are said to be corporeal hereditaments. A reversion, a remainder, rights of common, rent charges, and advowsons are said to be incorporeal hereditaments. Under the rules of the common law different modes of transfer were applicable to corporeal and to incorporeal hereditaments respectively. For the transfer of corporeal property a delivery actual or symbolic was necessary. It was said to *lie in livery*. Incorporeal property was supposed not to admit of delivery. It was therefore transferred by means of a writing and was said to *lie in grant*. This practical difference was, however, abolished by the act 8 & 9 Vict. c. 106. The distinction between corporeal and incorporeal hereditaments has no rational foundation. The corporeal hereditaments are objects of rights; the incorporeal hereditaments are peculiar species of rights. A right in possession is just as incorporeal as a right in reversion, whilst the object of the right, say a house, is equally corporeal in either case.

The distinction between things corporeal and things incorporeal may, however, be used in a more rational way. If by proprietary rights we understand rights available against all the world as opposed to rights only available against particular persons and capable of pecuniary valuation, we find that some proprietary rights have definite material objects corresponding to them, whilst other proprietary rights have no such object. Thus to the right of ownership always corresponds a particular horse, house, book, etc. But nothing of the sort corresponds to a copyright or patent right. He who has the copyright in a book has merely the right to prevent

any other person from publishing it. He who has taken out a patent for an invention has simply the right to prevent any other person from applying the invention. It is not the control over the material object, the manuscript or the model,—for that the owner already possesses to the fullest extent, it is the forbearance of others from certain actions which makes a copyright or patent right valuable, and which may be said to be the object of either right. The same reflection applies to the right in a trademark.

The importance of rights of this class would hardly be recognised except in a high stage of economic and legal development. In so far as their recognition secures an adequate reward to the creative faculties of man, it is a potent means of economic progress. But the distinction between things corporeal and things incorporeal as hitherto drawn in legal systems is of little value for jurisprudence and of no consequence for economics.

[Moyle, *Institutes of Justinian*.—Williams, *Law of Real Property*.—Holland, *Jurisprudence*. See also **IMMATERIAL CAPITAL**.] F. C. M.

INCREASING RETURNS. From the time when **DIMINISHING RETURNS** (*q.v.*) to agricultural industry first began to attract attention it was held that the returns to manufacturing industry increase with the increase of the absolute amount of labour employed. The contrast between agriculture and manufactures in this respect was pointed out by Malthus (*Nature and Progress of Rent*, 1815, p. 45), West (*Application of Capital to Land*, p. 7), and M'Culloch (*Political Economy*, 1st ed. pp. 277-278). It was elaborated by Senior (*Political Economy*, 8vo ed. pp. 81-86) and J. S. Mill (*Principles*, bk. iv. ch. ii. §§ 1-3). The tendency of later writers has been rather to soften the contrast; they insist upon the fact that up to a certain point agriculture gives increasing returns and that manufactures are subject to diminishing returns inasmuch as they require both raw materials and space (Marshall, *Economics of Industry*, 1879, pp. 21-26, 89-90). In *Principles*, vol. i. bk. iv. ch. xiii. § 3, Prof. Marshall says, "While the part which nature plays in production conforms to the law of diminishing return, the part which man plays conforms to the law of increasing return."

[An interesting review of the various standpoints from which the laws of increasing and diminishing returns have been laid down will be found in J. R. Commons, *The Distribution of Wealth*, 1893. See also J. H. Hollander in *Quart. Journ. of Econ.*, January 1895.] E. C.

INCREMENT, THE UNEARNED. 1. *What is meant by the Unearned Increment.*—Although the germ of the idea may be traced in the *Wealth of Nations*, and is distinctly seen in Ricardo's *Principles*, the term "unearned increment" was first invented by J. S. Mill. By

"unearned increment" is meant that increase in the value of anything subject to a natural monopoly which is due not to the expenditure of capital, labour, or skill by the proprietor, but to the general progress of society resulting in an increased demand for that thing. An unearned increment may thus arise upon any kind of property of which the supply cannot be increased, e.g. the pictures of a dead artist. But the only kind of property usually considered with reference to the unearned increment is land. For land is the most important thing subject to a natural monopoly. Land is essential to the human race, as affording them room for their habitation, food to maintain life, and the raw material for all their industry. The extent of land available is also limited. True, the limit is not absolute. Much of the surface of the globe lies as yet unused and even unexplored. Even in civilised and populous countries there is always some land allowed to lie waste or far less improved than it might be. But the land not yet used or improved is land which, on account of position, or climate, or infertility, or some other disadvantage, is comparatively inconvenient. Mankind resort first to the land which is, under all the circumstances, most convenient to them. This land is so far limited that with the progress of society and the recourse had to less favoured land, economic rent makes its appearance. Economic rent, a thing quite distinct from rent in the ordinary sense, represents an unearned increment. But even if all the land belonging to a community were equally suitable for every purpose, its value would rise with the progress of the community and there would result an unearned increment.

The growth of the unearned increment in a progressive society is not uniform or interrupted. In the case of arable land, the unearned increment may be reduced or even annihilated by such causes as agricultural improvements or better means of communication which open up new sources of supply. Thus over a great part of rural England at the present day the rent actually obtainable represents a very moderate return on the capital which the landlords or their predecessors in title have expended on the improvement of the land and the buildings. Economic rent and unearned increment have not merely ceased to grow but have for the time being disappeared. Similar fluctuations may occur with reference to property in mines. Setting aside the depreciation resulting from progressive exhaustion, mines usually tend to become more and more valuable as society advances in prosperity. The increased demand for minerals and the improvement of means of transport bring an unearned increment to the mine-owner. But in this case also, the progress of society may open up new sources of supply and lessen the value of the old. Thus

the working of silver mines in Europe has been made unprofitable by the competition of far richer mines in America and Australia. Here therefore economic rent and unearned increment have been annihilated. The most striking illustration of the unearned increment is afforded by land which derives its value from situations, such as the building sites in or near great cities. The advantage of situation is a monopoly of the strictest kind. It cannot be communicated to land which does not naturally possess it. It is so valuable that wealthy individuals or corporations will pay almost any price to obtain it. The shopkeeper who desires the custom of the rich must have premises in a fashionable street. The millionaire who desires the pleasures of good society must have a mansion in a fashionable quarter. A great bank must have its principal office in a central part of the capital. A great warehouse must be situated conveniently with respect to docks or railway stations. Many persons are obliged to live close to the place where they do their work, and there is a great deal of work which can be performed only in places possessing a peculiar advantage of situation. Owing to these and similar circumstances the competition for good sites in a great city is extraordinarily keen. Within recent years land in the city of London has been known to sell at the rate of £150,000 per acre, or higher, whilst excellent arable land within thirty miles of London has been sold for considerably less than £10 an acre. The whole difference between these prices may be regarded as an unearned increment (see BETTERMENT).

2. *The Unearned Increment as a subject of Taxation.*—With the progress of democratic ideas and of the desire to impose taxation as far as possible upon property, it was natural that proposals should be made for transferring to the state the unearned increment, which is the result not of the exertions of proprietors, but of the general growth of society. Such proposals differ chiefly as they are more or less far-reaching. They may be distinguished into three classes accordingly as they (1) contemplate the transfer of the ownership of land from private persons to the state, or (2) whilst contemplating the continuance of private property in land, would involve the appropriation of the unearned increment by the state, or (3) provide for such appropriation only in the case of unearned increment arising from special causes.

3. *Criticism of these Proposals.*—(1) Proposals of the first class are sometimes extended to every species of landed property, and sometimes are restricted to certain species on which the unearned increment happens to be unusually large, such as mines or building sites in cities and towns. When they extend to all kinds of land they amount to schemes for what is termed land nationalization, a subject too extensive

to be properly discussed here (see LAND, NATIONALIZATION OF). Shortly it may be said that such proposals have the appearance of a certain logical completeness, but would involve enormous practical unfairness in execution. Proposals for the transfer of particular kinds of landed property from private individuals to the state may be less difficult to carry out although less logical in theory. Upon the foundation of a colony it may be practicable to retain as a public patrimony land possessing special advantages of situation or of mineral wealth. But in any old country where private property in land of all kinds has been fully established for many centuries, schemes for the acquisition of urban land by municipal bodies, or of mines by the state, are not likely to be carried out. If fair compensation were given the operation would be perilous, for the public authority would have incurred the fixed charge of an immense debt in return for a property which might at any moment suffer depreciation through a decline of national prosperity. If no compensation or nominal compensation were given, the confiscation of the land in question would involve such an attack on rights of property as would amount to a revolution. In this case it is unlikely that private ownership of other sorts of land could survive.

(2) Proposals of the second class would not involve the abolition of private property in land. They are directed to the taxation of landowners to the extent of the unearned increment. J. S. Mill proposed and Mr. Dawson and other writers have repeated the suggestion that all the land in the United Kingdom should be subjected to a periodic official valuation and that the state should take for itself any increase in value which could not be shown to be due to the labour and capital of the proprietors. Schemes of this kind are not open to the moral or political objections which may be made to all schemes of confiscation. But their execution would involve serious difficulties. If Mill's proposal were applied to agricultural land, it would be found almost impossible to say how much of a growth in value was due to the general progress of society and how much to improvements effected by the proprietors. If the state were to call periodically for their accounts and to allow them the current rate of interest on the capital shown to have been spent in improvements, it would discourage all the most intelligent and useful improvers. For the return upon agricultural improvements is not really uniform. Some never repay their cost; others are highly profitable. It may also be urged that if the state is to deprive landowners by special enactment of increase of wealth due to the progress of society, the state should also guarantee them against loss of wealth due, not to their own default, but to changes in economic conditions.

(3) Schemes which provide for the appropriation by the state of unearned increment arising from certain special causes only must be considered each on its own merits. One of the most familiar schemes of this kind is known as Betterment (see BETTERMENT). Its object is to secure for municipal authorities the whole or part of the increase in value accruing to town property from the execution of improvements at the public expense.

4. *Conclusion.*—In conclusion, it may be said that no practicable scheme for securing the unearned increment on land to the state has yet been devised. Further it may be doubted whether the subject is of really momentous consequence. It is true that in Great Britain during the past hundred years, and still more in new countries such as the United States, the unearned increment on certain kinds of landed property has been prodigious and has resulted in vast private fortunes. It is natural therefore that reformers should find in the appropriation of the unearned increment a substitute for every other kind of taxation, and should debate upon the good which the national and local authorities might have done with this vast revenue which nobody would have missed. A sceptic might reply that a great revenue which is raised without being felt is usually spent in the most foolish and mischievous manner, as may be seen by the use which our American kinsmen have made of the resources derived from their stringent tariff. But further, it may be urged that the state has an indefinite power of taxation, and that under a democracy, which is the most costly of all forms of government, taxation is always becoming heavier, and is more and more thrown upon property, especially, where landowners are few, upon landed property. Under these circumstances, it is certain that the national and municipal authorities will in future draw an ample revenue from landed property whether or no any unearned increment has accrued thereon. The taxation of the unearned increment included in the Budget of 1909 is not by any means on the lines laid down by Mill, as apparently it is to be a tax on one class only, not "balanced by taxes on other classes" of the community, which he considered essential to secure justice. But till the proposal is accepted by Parliament more cannot be said.¹

[See Adam Smith, *Wealth of Nations*, bk. v. ch. ii.—Ricardo, *Principles of Political Economy of Taxation*, ch. x.—Mill, *Principles of Political*

¹ The "unearned increment" on land has been referred to throughout this article, as the examples which economic writers have taken have been practically without exception drawn from that particular class of property. The doctrine is, however, theoretically as applicable to every other description of property—for example, to shares in trading companies. Such shares have been known to have risen in price from £1 to £40 in a short space of time. Would the £39 in this case be "unearned increment"?

Economy, bk. v.—and *Papers on Land Tenure in Dissertations and Discussions*, vol. iv.—Cobden's later speeches.—Dawson, *The Unearned Increment*. Many references to the subject are scattered through the extensive literature relating to RENT.] F. C. M.

INCREMENTUM or **CREMENTUM**, a term used in mediæval accounts. To understand its exact meaning requires some knowledge of the manner in which a statement of receipt and expenditure was drawn up in the middle ages. The simplest way to explain it will be to take a particular example. Suppose we consider the form of a bailiff's yearly account of the estate under his management. First comes the *onus* or charge beginning "This accountant is charged with," or "This accountant renders account of so much for so and so," mentioning all the items of the year's income: then follows the expenditure account, beginning "of which (money) so much (is expended) in so and so," mentioning all the items of expenditure. At the end, or in the case of the Pipe Rolls at the beginning, is the amount of money handed over by the accountant, and finally the statement *debet* or *quietus est* or *habet de superplus* with the sum owed by him to the estate or by the estate to him, as the case might be. The difference between this and a modern statement of receipt and expenditure is not apparent on the face of it. Consider, however, one typical item, the rental account for instance. On the charge side will be simply: "Rents—so much," without any particulars. On the expenditure side, before the sums spent in repairs etc. will be a number of entries such as "so much for rent unpaid for such and such a house because unlet," or "because its rent has been reduced by that amount," or "because it is in ruins." In fact the charge is the whole rental of the estate as ascertained by a survey made at some time, it might be years before the bailiff entered into office, any diminution of rental being accounted for as a modern bailiff would account for expenditure. Any increase in this rental, owing to new sources of revenue being developed since a survey was made, was called *Incrementum*, and was either accounted for under a separate sub-heading or added to the amount of the charge year by year. This system was carried out to a great extent in all mediæval accounts, the tendency being, whenever possible, to charge the accountant with a definite sum, which did not vary from year to year, and to consider any fluctuations as distinct items of revenue or expenditure under the names of *incrementum* and *allocutiones* or *acquiescentie*. One of the principal fiscal provisions of Magna Charta, as issued in 1215, was, that the counties should be kept at their old farms *absque ullo incremento* (see **FARM OF THE COUNTIES, PIPE ROLLS**).

[Madox, *History of the Exchequer*, London, 1769.]

A. E. S.

INDEMNITÉ (Fr.). Besides the ordinary acceptance of the word indemnity as compensation for damage by individuals or prejudice caused by acts of the authority in the general interest, it is employed in France to designate the payment received by persons exercising public functions unpaid. The indemnity of senators and deputies is fixed by the electoral laws of 1875 at fr. 9000 (£360) a year. If they already exercise an office paid by the state their salary is suspended while they sit in parliament, unless the salary is greater than the indemnity, in which case they receive the difference. The law declares expressly that the functions of municipal councillors are gratuitous, the only exception being the right of the council to allow a sum of money to the mayor to uphold the dignity of his office; but the Paris municipal councillors, taking advantage of the distinction made between salary and indemnity, have for some years past voted themselves annually an indemnity, first of fr. 4000 (£160) each, afterwards increased to fr. 6000 (£240) for their personal expenses. The illegality of the vote is incontestable, but the government has so far tolerated the infraction of the law.

T. L.

INDEMNITY. A promise whereby one person undertakes to indemnify (to hold harmless) another against a liability undertaken on behalf of indemnifying party. An indemnity must be distinguished from a **GUARANTEE** (*q.v.*). If a person is entitled to indemnity against a liability he may, when sued in respect of such liability, serve a "third party notice" on the indemnifying party, who will thereupon become bound by the judgment, unless he becomes a party to the action and disputes his liability.

E. S.

INDENTURE. A deed under seal, if made between two or more parties, is called an "indenture"; if it is the deed of one party only, a "deed poll." The first-mentioned name came to be used as deeds executed by several parties were generally copied out twice on the same parchment, which was then separated by an indented division.

E. S.

INDEX NUMBERS are used to indicate changes in the value of money. The objects for which this measurement is undertaken are thus well stated by Sir R. Giffen (Second Report of the committee appointed for the purpose of investigating the best method of ascertaining and measuring variations in the value of the monetary standard. Report of the British Association, 1888):—(1) The fixation of rents or other deferred payments extending over long periods of time, for which it has been desired to obtain a currency of a more stable sort than money is supposed to be. (2) To enable comparisons to be made between the value of money incomes in different places, which is often an object of great practical interest: not only

individuals contemplating residential changes, but also governments and other large spending bodies, spending money in widely distant places, having to consider this question. (3) To enable historians and other students making comparisons between past and present to give an approximate meaning to the money expressions which they deal with, and say roughly what a given fine, or payment, or amount of national revenue or expenditure in a past age would mean in modern language. To which some would add: (4) To afford a measure of the extent to which trade and industry have been injuriously affected by a variation in prices; and of the correction which it would be desirable to apply to the currency.

An index number is constructed by combining several items, each of which is a ratio between the price of a certain article at a particular date under consideration (*e.g.* last year or month) and the price of the same article at a period taken as base or standard (*e.g.* 1867-77, in the index number constructed by Mr. Sauerbeck, *Journal of the Statistical Society*, 1886 and 1893). These ratios are generally expressed as percentages. *E.g.* the percentage for *flour* in 1885, as given by Mr. Sauerbeck, is 63; meaning that the price of flour in 1885 is to the average price of the same article in 1867-77 as 63:100. The term index number is sometimes applied (*e.g.* by Mr. Sauerbeck, *op. cit.*) to each of these items, as well as to their combination.

The percentages are usually compounded by taking an AVERAGE of them. But a result of equal generality may be obtained by taking their sum. One of the best-known index numbers, that of the *Economist*, is thus constructed. Twenty-two articles having been selected, the price of each article at the current date compared with its price at the standard period (1845-50) is expressed as a percentage; and the sum of these percentages is put as the index number. Thus the *Economist* index number for the year 1873 is 2947; such a sum is easily reduced to the form of an average by simple division (*e.g.* $2947 \div 22 = 134$). Accordingly in what follows it will be sufficient to consider the latter form only.

The construction of an index number presents the following problems: (a) What are the commodities of which the prices are to be taken? (b) How are the prices to be ascertained? (c) How are the ratios between the prices of each article at the current and the standard dates to be combined?

The answers to these questions vary according to the purpose in hand (above, pp. 384-5). As appropriate to the first purpose, a standard of deferred payments, two methods present themselves, viz. to arrange that the debtor should pay, the creditor receive, either (1) the same quantity of goods and services, the same amount

of utility, so to speak; or (2) the product of the same quantity of labour—or more exactly effort and sacrifice.

Of these methods the former has been more generally accepted. It is adopted for instance by the British Association Committee already referred to, as *par excellence* the measure of the change in the value of the monetary standard. The former method is indeed more practicable, perhaps more intelligible. However, in favour of the latter there are some weighty considerations and authorities. It seems to be the nearest possible approach to Ricardo's conception of a commodity invariable in value, "which at all times requires the same sacrifice of toil and labour to produce it" (*Principles*, iii. ch. xx., "On Value and Riches," *op. Mill*, bk. iii. ch. xv., "On a Measure of Value"). "A standard," says Lord Courtney, "should be something which as far as possible involves the same labour and the same sacrifice in obtaining it" (*Nineteenth Century*, March 1893). Prof. Marshall, in his evidence before the royal commission on gold and silver, says, speaking of appreciation of gold: "When it is used as denoting a rise in the real value of gold, I then regard it as measured by the diminution in the power which gold has of purchasing labour of all kinds—that is, not only manual labour, but the labour of business men and all others engaged in industry of any kind" (Question 9625).

If the first method is adopted, the answers to the questions above set are as follows: (a) The commodities of which the prices are to be taken should be articles of consumption rather than materials and implements. Payments for personal services should be included, but not wages in general. (b) Retail prices should be used. (c) The proper combination of the ratios is an average of the kind technically called *weighted* (see AVERAGE). The general principle according to which the weights are to be assigned is that they should represent the importance of each commodity to the consumer. But this idea may be embodied in different plans.

1. One plan is to assign as the weight of each percentage, or ratio between prices, the value of the corresponding commodity at the initial or standard period. According to this plan the index number is the ratio between these two values: the quantities initially consumed at the prices of the current date, and the same quantities at the standard prices. This method is exemplified by Sir R. Giffen's estimate of the change in the value of money between 1873 (and 1883) and *earlier* years, in his report on prices of exports and imports, 1885, table v.

2. Another plan is to assign, as the relative importance of each percentage, its value at the particular epoch, the current year. This plan is adopted by Sir I. Palgrave's memorandum

on *Currency and Standard of Value* . . . in the third report of the royal commission on depression of trade and industry, table xxvii.

3. According to another plan, the index number is the ratio between the following two values: the quantities consumed at the current date at the current prices, and the same quantities at standard prices. This plan is adopted by Mr. Sauerbeck (*Journ. Stat. Soc.*, 1886, p. 595).

4. Or, instead of taking either the initial quantities or those of the current date, a mean between the two may be taken. This is the plan adopted by the British Association Committee. They estimate "the average national expenditure on each class of article at present and for the last few years"; and put for the relative importance of each commodity a round number corresponding to that estimate. Thus the estimated expenditure per annum on *wheat* is £60,000,000, and on *meat* £100,000,000: that is respectively 6·5 per cent, and 11 per cent of the sum of the corresponding estimates for all the commodities utilised by the committee. As convenient approximations, the weights five and ten are recommended by the committee.

If the index number based on labour (see above, p. 385), rather than on consumption, is adopted as the standard for deferred payments, it would be proper by analogy to take as the measure of appreciation or depreciation the change in the pecuniary remuneration of a certain set of services, namely all, or the principal, which are rendered in the course of production throughout the community during a year, either at the initial or the current epoch; or some expression intermediate between the two specified. But it may be doubted whether the statistics requisite for this method are available.

✓ With regard to the second and third of the purposes above enumerated, the determination of the comparative value of money at distant places and remote times—one or other of the two methods indicated would seem to be theoretically proper.

For the fourth purpose, the regulation of currency, the proper construction of the index number would seem to be as follows: (a) The "articles" of which the prices are taken into account should be both commodities and services; (b) both wholesale and retail prices should be used; (c) the relative importance of each article should be proportioned to the demand upon the currency which it makes. But here as in other parts of the subject theory halts a little, and statistics lag far behind theory.

Considering the theoretical doubts and statistical difficulties which attend the determination of *weights* proper to each purpose, there is much to be said in favour of assigning equal relative importance to all the items; especially if care is taken to include many articles such as *corn*,

cotton, etc., which for any of the purposes which may be contemplated must be of first-rate importance. Such is the character of some of the principal index numbers which have been constructed—those of the *Economist*, of Jevons, of Soetbeer, and of Mr. Sauerbeck.

In the construction of such an index number the use of the arithmetic mean is not imperative. Jevons employs the geometric mean. His reasons for preferring it are not very clear (the "Variation of Prices," *Currency and Finance*, p. 120). A more intelligible explanation is given by Prof. Westergaard (*Wahrscheinlichkeitslehre*)—the geometric mean alone presents a certain consistency between its results, which may be thus indicated. Taking any three dates, x , y ,

z , put the symbol $\left(\frac{y}{x}\right)$ to denote the index number for the date y referred to the date x as standard; with similar interpretations for $\left(\frac{z}{x}\right)$

and $\left(\frac{z}{y}\right)$. Then $\left(\frac{y}{x}\right) \times \left(\frac{z}{y}\right) = \left(\frac{z}{x}\right)$, as it ought

by analogy with perfect measurements in other sciences, if the geometric mean be used, but not if any other mean be employed. The geometric mean has also the advantage of being less liable than the ordinary average to be unduly affected by extremely high prices (*Report of the British Association*, 1887, p. 283). The great objection to the geometric mean is its cumbrousness.

There is another kind of mean which has some of the advantages of the geometric, and is free from its essential disadvantage; namely, the median (see AVERAGE), which is formed by arranging the items in the order of magnitude, and taking as the mean that figure which has as many of the items above as below it. For instance the median of the forty-five percentages on which Mr. Sauerbeck's index number is based was, for 1892, 66; while the arithmetic mean was 68. It is difficult to see why the latter result is preferable to the former; if what is required is an *index* of the change in general prices, not specially referred to any particular purpose, such as of securing a constant benefit to a legatee.

The perplexity of a choice between such a variety of methods is much reduced by the two following considerations. *First*, beggars cannot be choosers. The paucity of statistical data (see the report drawn up by Sir R. Giffen in the *Report of the British Association* for 1888, p. 183) restricts the operation. Thus for the purpose of index numbers based on consumption (above, p. 385) retail prices are theoretically appropriate; but "practically it is found that only the prices of leading commodities, capable of being dealt with in large wholesale markets, can be made use of" (Giffen, *loc. cit.*). *Second*, the difference between the results of different methods is likely

to be less than at first sight appears. For instance, the probable difference between the index number constructed by the British Association committee, and six others which have been proposed by high authorities—supposing the different methods to be applied to the same data, viz. the prices of twenty-one articles specified by the Committee may thus be expressed. The discrepancy which is as likely as not to occur between the committee's and other results is from 2 to 2.5 per cent. The discrepancy which is very unlikely to occur is from 8 to 11 per cent (*Report of the British Association for 1888*, p. 217). In fact, the index number for the year 1885, as determined from the same data by seven different methods, proved to be 70, 70.6, 73, 69, 72, 72, 69.5 (*ibid.* p. 211).

The practical outcome of these two considerations is thus well expressed by Giffen (*loc. cit.* p. 184), "The articles as to which records of prices are obtainable being themselves only a portion of the whole, nearly as good a final result may apparently be arrived at by a selection without bias, according to no better principle than accessibility of record, as by a careful attention to weighting. . . . Practically the committee would recommend the use of a weighted index number of some kind, as, on the whole, commanding more confidence. . . . A weighted index number, in one aspect, is almost an unnecessary precaution to secure accuracy, though, on the whole, the committee recommend it."

[Airy, G., *Memoirs of the Astronomical Society*, xxviii. (refers to a physical problem which has considerable analogy to the determination of the changes in the value of money with respect to things in general; namely, the determination of the motion of the solar system in space—relative to the stars in general).—Bela Foldes, W., *Jahrb. f. Nat. Oekon.*, 1882; *Statistische Monatsschrift* (Vienna), 1881 (refers to changes in the value of Austrian inconvertible currency).—Bourne, S., *Journal of the Statistical Society*, 1879 (exemplifies the principle of weight).—Cross, W., *Standard Pound v. Pound Sterling*, (1856) (proposes a change in the standard *per saltum*, as often as the index number changes to the extent of say 3 per cent).—Drobisch, M., *Bericht. Kön. Sachs. Gesell. Wissenschaft* (Leipzig), 1871; *Jahrb. f. Nat. Oekon.*, 1871 (suggests ingenious methods of combination).—Edgeworth, F. Y., "Memoranda on the best methods of ascertaining and measuring variations in the value of the monetary standard" (*Report of the British Association for 1887, 1888, 1889*), (a voluminous disquisition, of which the above article may be regarded as an abridgement).—Forsell, H., *Guldbristen* (Stockholm, 1886), translated into English (interesting as showing the different results which can be brought out when different articles are selected).—Giffen, Sir R., *Parliamentary Reports*, 1881-85; *Essays in Finance*; *Report of the British Association for 1888*, p. 181 *et seq.* (very masterly).—Jevons, *Currency and Finance* (quite classical).—Laspeyres, *Jahrb.*

f. Nat. Oekon., 1864, 1871; *Zeitschrift für die Gesamte Staatswissenschaft*, 1872 (constructs important index numbers for various classes of goods).—Lehr, J., *Statistik der Preise*, 1885 (proposes a cumbersome but theoretically interesting scheme).—Lowe, Joseph, *Present State of England*, 1833 (one of the fathers of this school of writers).—Marshall, *Contemporary Review*, 1887 (offers very valuable suggestions for the construction of an index number based on consumption).—Nicholson, J. S., *Journal of the Statistical Society*, 1887 (recommends an index number based on the change in the monetary value of property or capital).—Nitti, *La Misura delle Variazioni di Valore* (contains some subtle criticism and many useful references).—Palgrave, R. H. I., *Third Report on Depression of Trade* [Appendix B.], (constructs an important weighted index number, and discusses other forms).—Shuckburgh, Sir George, *Phil. Trans.*, 1798, part i. (perhaps the earliest attempt to construct an index number).—Poulett Scrope, *Political Economy* (1833) (proposes an index number under the name of a *Tabular Standard*).—Sauerbeck, A., *Journal of the Statistical Society*, 1886, and 1893 (constructs an important index number based on the prices of forty-five articles); *Economic Journal*, June and September 1895 (replies to objections against their index numbers by Mr. N. G. Pierson and Mr. Sauerbeck).—Scharling, W., *Jahrb. f. Nat. Oekon.*, 1886 (throws some doubt on the apparent change in the purchasing power of money).—Sidgwick, H., *Political Economy*, bk. i. ch. ii. (states different methods of constructing an index number based on consumption).—Soetbeer, *Materialien zur Währungsfrage*, 1886, brought up to date in the *Jahrbücher f. Nat. Oekon.*, 1892 (one of the most important contributions to theory and practice).—Walker, *Money and Trade*, and *Political Economy Appendix* (regards the use of a tabular standard as limited).—Walras, *Théorie de la Monnaie*, 1886 (proposes to regulate currency by means of a proper index number).—United States report on retail prices by the Senate Committee on Finance, 1892 (an interesting verification of the principle that simple and "weighted" averages are not likely to differ very much).]

F. Y. E.

INDIFFERENCE, LAW OF, a designation applied by Jevons to the following fundamental proposition: "In the same open market, at any one moment, there cannot be two prices for the same kind of article."

This proposition, which is at the foundation of a large part of economic science, itself rests on certain ulterior grounds: namely, certain conditions of a perfect market. One is that monopolies should not exist, or at least should not exert that power in virtue of which a proprietor of a theatre, in Germany for instance, can make a different charge for the admission of soldiers and civilians, of men and women. The indivisibility of the articles dealt in appears to be another circumstance which may counteract the law of indifference in some kinds of market, where price is not regulated by cost of production.

[Jevons, *Theory of Exchange*, 2nd ed. p. 99 (statement of the law).—Walker, *Pol. Econ.*, art. 132 (a restatement).—Mill, *Pol. Econ.*, bk. ii. ch. iv. § 3 (imperfections of actual markets).—Edgeworth, *Mathematical Psychics*, pp. 19, 40 (possible exceptions to the law of indifference).]

F. Y. E.

INDIRECT TAXATION, in the ordinary English use, is that which is "demanded from one person in the expectation and intention that he shall indemnify himself at the expense of another" (Mill, *Principles*, bk. v. ch. iii. § i.), *i.e.* it comprises taxes on commodities levied from producers or dealers.

The administrative application of the term, at least on the continent, is wider. "Indirect taxation is levied on the occurrence of a fact, act, or exchange; it does not require lists of contributions regularly or periodically established" (Leroy-Beaulieu, *Science des Finances*, t. i. p. 273, *cp.* Wagner, *Finanzwissenschaft*, vol. ii. p. 239). It therefore covers taxes on successions and gifts as well as the stamp and registration duties.

According to the PHYSIOCRATS (*q.v.*) all taxes, except that levied on the *produit net*, were indirect, since they were necessarily shifted to it (see DIRECT TAXATION AND TAXATION).

[A. Wagner, *Finanzwissenschaft*, vol. ii. pp. 239-247.] C. F. B.

The passage from Mill quoted above includes, among the class "Indirect," such taxes as—

"the excise or customs. The producer or importer of a commodity is called upon to pay a tax on it, not with the intention to levy a peculiar contribution upon him, but to tax through him the consumers of the commodity, from whom it is supposed that he will recover the amount by means of an advance in price" (Mill, *Principles*, bk. v. ch. iii. § i.).

Mill's definitions of direct and indirect taxes make the difference to turn upon the mode of incidence, a division probably originally suggested by the theory of the PHYSIOCRATS (*q.v.*) that all taxes being paid ultimately out of the "net produce" of land, it would be better to impose a single tax charged *directly* on the landowners than to assess the fund *indirectly* by other taxes. But, as Sidgwick (*Principles of Political Economy*, bk. iii. ch. viii. § 8) says—

"we can only partially succeed in making the burden of 'direct' or 'indirect' taxes fall where we desire; the burden is liable to be transferred to other persons when it is intended to remain where it is first imposed; and, on the other hand, when it is intended to be transferred, the process of transference is liable to be tardy and incomplete."

Thus—

"In common parlance the distinction between direct and indirect taxes is practically relegated to the mind of the legislator: what he wishes to have borne by the original taxpayer is called a

direct tax, what he intends to have borne by some one else than the original taxpayer is called indirect. Unfortunately the intention of the legislator is not identical with the actual result. We must, then, either revise our nomenclature or declare the present distinction of little value" (Seligman, *The Shifting and Incidence of Taxation*, 1899, p. 311).

A distribution of taxes subject to change with every new theory of incidence must necessarily, whatever may be its value in economy, be almost useless for administrative purposes. Hence Bastable states that—

"practical financiers have adopted a different basis of distinction, and regard those taxes as direct which are levied on permanent and recurring occasions; while charges on occasional and particular events are placed under the category of indirect taxation" (*Public Finance*, ed. 1903, p. 271).

Under this method the income tax is direct, and the excise and customs indirect, as in Mill's definitions, but the death duties from direct become indirect. This classification, which is based on the possibility or otherwise of having a list of taxpayers (*rôle nominatif*) is that adopted in France. P. Leroy-Beaulieu objects to it as empirical, and confounding things which ought to be distinguished. He would define a tax as direct if it was intended to charge the taxpayer immediately and proportionally to his fortune or revenue, and as indirect if otherwise (*Science des Finances*, 1899, vol. i. 273). Wagner (*Finanzwissenschaft*, 1890, vol. ii. 237-247) gives a full account of the controversy with respect to terminology. He favours a definition based on incidence.

Bastable, desirous of retaining the broad line of division that the old meaning of "direct" and "indirect" gave, observes that —

"if we take the terms, not as giving a complete classification of taxes, but as marking the presence or absence of a certain characteristic, they may be employed with advantage, but rather to suggest reasons for discrimination than to definitely settle results." He starts, then,

"with the conception of direct taxes as those levied immediately on the 'subjects,' or ultimate bearers, of the charge, and therefore embracing taxes on income and property, or on their component parts, in opposition to duties on commodities and on exchange, where there is a shifting of the burden from the immediate payer to the 'subject' which justifies the name of 'indirect,'"

and proceeds to consider the merits and defects of each class. On the borderland between direct and indirect taxes he places taxes on transfers, on contracts, on communication and transport, and, in short, the numerous charges on acts (pp. 349-356).

In favour of direct taxation may be urged facility and small cost of collection, combined

with definiteness of yield, whilst against it are the unpopularity of the collector's demand for payment, the difficulty of taxing directly the poorer members of society, and the inelasticity of certain forms of charge, e.g. on lands and houses, the assessment of which is usually of necessity fixed for some years. Indirect taxation is more costly to collect, and more variable in its yield, owing to the power of increasing or diminishing consumption of taxed commodities at will, but it is hardly felt at the time of payment, is available for reaching the poorer classes, and in times of prosperity is automatically expansive. Its special drawback is the danger of loss through the disturbance of industry, particularly by excise interference with freedom of manufacture. (For the point of view of a finance minister, see Hansard, [162] 583-585.)

"In spite of the evils that are associated with indirect taxation, and are only partially prevented by fiscal improvements, it has been found necessary by all the great nations of modern times to retain customs and excise duties as an important part of the tax system. In England, Russia, and France the excises and customs yield about half the national revenues. In Germany the imperial legislation regulates the customs and excises on salt, tobacco, spirituous liquors, beer and sugar, and with three exceptions the constituent States do not tax these things. In the United States the federal government draws most of its revenue from excises and customs in nearly equal proportion. In comparing direct and indirect taxes both must be considered as parts of the whole tax system. The chief merit in either case is that the one remedies the defects of the other." (Nicholson, *Elements of Political Economy*, 1903, p. 481.) (See DIRECT TAXATION. COST OF COLLECTION OF TAXES. TAXATION.)

F. A.

INDIRECT UTILITY. A distinction has been drawn between direct and indirect utility. "Direct utility," Jevons says (*Theory of Political Economy*, ch. iii.), "attaches to a thing like food, which we can actually apply to satisfy our wants. But things which have no direct utility may be the means of procuring us such by exchange, and they may therefore be said to have indirect utility."

Jevons refers, in connection with this, to the following passage in Garnier, *Traité d'Economie Politique*, 6th ed. ch. i. § iii.: "Utility is direct or indirect. It is direct in the case of things the immediate application of which satisfies our wants; a loaf of bread possesses this utility for a man suffering from hunger. It is indirect in the case of things which are only the means whereby we can procure what is necessary to satisfy those wants, which they cannot themselves satisfy. For instance, a man possesses two pieces of bread: with one he satisfies his hunger; this is an example of direct utility: urged by thirst, he

exchanges the other for something to drink; this is an example of indirect utility.

"Utility which is no longer direct acquires the quality of being interchangeable, and becomes also 'value'" (see UTILITY).

INDIVIDUALISM. This term was applied by J. S. Mill (*Socialism*, p. 114) to that system of industrial organisation in which all initiative is due to private individuals, and all organisation to their voluntary agreement. Under such a system the functions of the state are restricted to the maintenance of order, including the defence of the country, the enforcement of contracts, and in general to supplying the conditions necessary to the working of voluntary action. The natural antithesis to individualism is COLLECTIVISM or we may say SOCIALISM, a system under which industry is directly organised by the state, which owns all means of production and manages all processes by appointed officers.

In its extreme form individualism would deny to the state industrial activities of every sort, even the construction of roads, bridges, and harbours, and the coinage of money. Going still farther, it is discovered that the so-called repressive functions of the state are mostly industrial. Lawsuits are a species of compulsory arbitration of disputes, including industrial ones. The punishment of theft is the repression of a personal activity known to be pernicious. A few have been found who disapprove even of these functions of the state and urge their entire abolition. They are properly known as anarchists or disbelievers in any government, and they represent the utmost range of individualism. In the following discussion it will be understood that only a qualified individualism is intended, that is to say, such a compromise with the opposite principle as has been represented by the most individualistic of modern states.

The essential features of individualism are, (1) private property in capital, to which are added almost of necessity the rights of bequest and inheritance, thus permitting unlimited transfer and accumulation. (2) Competition, a rivalry between individuals in the acquisition of wealth, a struggle for existence in which the fittest survive.

It is evident that both these principles have advantages and disadvantages for society. In entering a field where controversy has been violent, only a brief enumeration of admitted tendencies is appropriate. Among the advantages of individualism should first be mentioned the enormous incentive it furnishes to the accumulation of property and so indirectly to the production of wealth. Tasks are undertaken in hope of unusual personal advantage which would not be undertaken by a man receiving a moderate and fixed reward not influenced by special achievements. It is plain that a

considerable class of persons are thus induced to exert to the utmost faculties which would otherwise lie dormant. Further, the control of funds of capital by individuals enables them to develop ideas of great value to society, but ideas which society would not value until so developed. Thus it is claimed that individualism not only excites ingenuity but gives it scope, and utilises it in a way that socialism would not so obviously do. Finally, quite apart from all material advantages there should be noted the intellectual qualities which individualism develops—shrewdness, penetration, aggressiveness, and independence. These characterise in a high degree the foremost members of an advanced individualistic society.

Certain disadvantages are, however, equally obvious. The principle of natural selection seems to be abnormally active in a vigorous individualistic society. If great incentives are furnished to certain men, their number is increasingly small. The hope of accumulation becomes a forlorn hope to most men in a highly organised individualistic society, and they suffer from a dearth of incentives destructive even of the simplest economic virtues. Thus the impetus given to production by individual incentives is partly neutralised by the deterioration or arrested development of the masses of the productive population from whom these incentives are increasingly withheld. It is further neutralised by the fact that the control of capital means also privilege in consumption. If men of wealth are merely capitalists, and consume moderately, the only danger arising from their disproportionate ownership is that of excessive formation of capital, but to this danger we must add that of occasional spendthrift consumption, alike detrimental and irritating to society. The tendency of capital to accumulate in the most competent hands has also its counterpart in the chances of inheritance, which often give it to those who are incompetent.

The more conspicuous disadvantage of individualism is the waste involved in competition. Its cost in active antagonisms and divided efforts is enormous, and has been frequently discussed. Finally, the intellectual qualities developed by individualism are more or less balanced by the ethical weakness which it involves. Individualism is avowedly egoistic. Competition has often seemed ruthlessly to eliminate ethical sentiment. At the best it threatens its existence.

It is impossible to weigh the merits and demerits of individualism without a fuller consideration of socialism than present data will allow. Suffice it to say that its disadvantages have been felt so seriously as to lead many countries of late to modify the system by increasing the industrial functions of the state.

The experiences of corporate industry cannot well be discussed here, but it is plain that such

a system is not individualistic, and that the principles of management are such as government is familiar with, and might conceivably use with an efficiency proportioned to the excellence of its own organisation. In this respect corporate industry resembles socialism as well as in the further respect that competition and its attendant waste are frequently eliminated, though the benefit that might result has not always inured to society.

The existing industrial system is in many respects a mixture of socialism and individualism and is doubtless destined to remain so, though in what proportion the two will ultimately combine it is impossible to predict. No scheme of complete socialism has been proposed which provides at all adequately for the utilisation of human originality for the ends of progress, or appreciates the value to society of a leisured class. On the other hand it is alleged that the best individualistic systems have largely squandered and perverted originality and developed a leisured class which has not risen to the level of its duties. The modern tendency of society to limit individualism is doubtless due to deeper ethical considerations, the development of which is one of the most remarkable features of the day.

[Any standard work on political economy is an analysis of the individualistic system. Ely, *Outlines of Economics*, analyses the present mixed system as such. Mill discusses the difficulties of collective or state industry. The weakness of individualism is stated with great force by socialist writers, best of all perhaps in Edward Bellamy's socialist romance, *Looking Backward*. Defence and counter criticism are to be found in the works of opponents of socialism, e.g. Rae, *Contemporary Socialism*, and Graham, *Socialism new and old*.

See also Montague, *Individual Liberty*.—Nicholson, *Principles of Political Economy*, vol. i. ch. xv.—Donisthorpe, *Individualism*.—Walker, "Mr. Bellamy," etc., *Atlantic Monthly*, Feb. 1890.—E. Richter, *Zukunftsbilder*, 1892.—Also SOCIALISM, App.] H. H. P.

INDORSEMENT. See BILL OF EXCHANGE.

INDUCTIVE METHOD. There is some ambiguity in the use of this expression. Sometimes it is used with reference to any inquiry in which results are arrived at by the study of concrete facts. The following passage from Prof. R. M. Smith, *Science Economic Discussion*, p. 111, illustrates this acceptation of the term. "Finally, we may ask, what can the inductive method do when it faces some great economic problem which affects the whole community and civilisation itself? Such a problem is the labour problem. What is the condition of the labouring class? Has that condition deteriorated or improved? The inductive method has not shrunk from attempting to find an answer to even such questions as these. Thorold Rogers has laboriously traced the condition of the English labourer during the last six centuries, for the

purpose of answering this question historically. Giffen has attempted, by statistics, to show that the condition of the labouring class has materially improved during the last fifty years." Dr. Keynes, on the other hand, objects to this use of the term (*Scope and Method of Political Economy*, p. 192, note) on the ground that "what is naturally understood by induction and the inductive method is a process of reasoning whereby, on the strength of particular instances, a general law is established." From this point of view, the instances given by Prof. Smith would rather be regarded as illustrating the statistical or realistic or concrete method of economic inquiry. It seems clear, however, that when an inductive method is spoken of it is not usually restricted to a method by which general laws are ascertained. Thus, Prof. Sidgwick says (*Scope and Method of Economic Science*, p. 33) that "even as regards the present condition of industry in the more advanced countries, to which the theory of modern economic science primarily relates, there is, I conceive, no dispute as to the need of what is called a 'realistic' or 'inductive' method—i.e. as to the need of accurately ascertaining particular facts when we are inquiring into the particular causes of particular values, or of the shares of particular economic classes at any given place and time." Here the inductive method is identified with the realistic, and is not conceived as necessarily concerned with the ascertainment of general laws, but only of particular causes at a particular place and time. The discussion of the correct use of the term induction must evidently be left to writers on inductive logic; but it may be permissible to remark here that Mill's influence has perhaps tended to narrow the use of the term in a way that is neither conformable to popular usage nor convenient for scientific purposes.¹ At any rate, when we speak of the inductive method with reference to political economy, it seems best to understand it as meaning any method by which truths of scientific value are obtained which are not directly deducible from principles already known. If the term is thus understood, Mill's inductive methods represent only a small part of inductive investigation; and the instances given by Profs. Sidgwick and Smith, so far as the results to which they refer are regarded as having scientific value, are correctly taken as illustrations of induction. It seems necessary to say that the results must have scientific value; for probably no one would regard mere economic history or mere statistics as illustrating the inductive method, or any other method, except in so far as they supply

results that are capable of throwing light on economic tendencies. Even Mill would no doubt have been willing to describe the instances given by Prof. Smith as "subsidiary to induction"; and perhaps it is simplest to regard processes subsidiary to induction as being themselves inductive in their nature.

Assuming, then, that induction and deduction are to be understood, in such a sense that between them they exhaust all the methods by which economic truths of any scientific value are ascertained, we have next to ask, What is the importance of the inductive method in economic research? This subject has been already to a considerable extent discussed in the article on DEDUCTIVE METHOD, and it is not necessary to add much to what is there said. The classical economists, led by Ricardo, are certainly chargeable with having comparatively neglected the inductive method. There are, however, some certain grounds on which their action may be defended. It may be said, on the one hand, that the facts to be dealt with by the economist are too complicated, and too little amenable to experimental treatment, to be suitable for the application of the inductive method. For this reason it may be urged that the observation of economic facts is seldom of any scientific value, except by way of verifying or correcting the results of deductive reasoning. This is no doubt largely true. A purely inductive investigation would be a long one; and the practical importance of some economic truths naturally renders us impatient of slow processes. Also, it is no doubt true that the economist has seldom the power of modifying his facts experimentally, so as to facilitate investigation. The importance of the latter point, however, may be exaggerated. The absence of experiment is partly compensated by the natural enterprise of human nature, on the one hand, and, on the other hand, by the possibility of forecasting results. The former fact gives rise to what is sometimes described as "unintentional experiment." This is perhaps an inaccurate expression;¹ but it is certainly true that the natural enterprise of human nature renders experiment less necessary in such a subject as economics than it is in the case of objects that are comparatively inert or that are difficult to observe under varying conditions. The power of placing ourselves imaginatively in different circumstances, and considering what the result would be,² is also a condition that renders actual experiment relatively unnecessary. It may be urged, however, on the other hand, that the latter circumstance

¹ See Keynes's *Scope and Method of Political Economy*, p. 169, note.

² This is what Cairnes describes (*Logical Method of Political Economy*, pp. 90-94) as "an inferior substitute" for experiment, or as "experiment conducted mentally." Cp. also Keynes's *Scope and Method of Political Economy*, p. 172, note.

¹ It is probable that the somewhat narrow view which Mill took of the aim and scope of induction is largely responsible for his low estimate of the value of the inductive method in economics. See his *Essays on some Unsettled Questions of Political Economy*, Essay V., and *System of Logic*, bk. vi. ch. ix.

to a great extent renders the inductive method itself unnecessary. "In order to know, *e.g.*," says Cairnes (*Logical Method of Political Economy*, p. 88), "why a farmer engages in the production of corn, why he cultivates his land up to a certain point, and why he does not cultivate it farther, it is not necessary that we should derive our knowledge from a series of generalisations proceeding upward from the statistics of corn and cultivation to the mental feelings which stimulate the farmer, on the one hand, and, on the other, to the physical qualities of the soil on which the productiveness of that industry depends. It is not necessary to do this—to resort to this circuitous process—for this reason, that we have, or may have if we choose to turn our attention to the subject, direct knowledge of those causes in our consciousness of what passes in our own minds, and in the information which our senses convey, or at least are capable of conveying, to us of external parts. Every one who embarks in any industrial pursuit is conscious of the motives which actuate him in doing so," etc. It is unnecessary, then, in such cases as these, to resort to the inductive method of inquiry, because the chief causes involved are known to us either by direct personal experience, or by sympathetic imagination, or by the instrumentality of language. But this is only partly true. In complicated cases it is difficult to disentangle motives—even our own,—and to estimate to what extent different considerations have weight in our conduct. And this is especially difficult when we have to compare the actions of men in different times and nations. In such cases an inductive method of investigation seems to be indispensable.

Summing up, then, we may describe the place of the inductive method in economics in this way. On the one hand, it is the method by which the premises of the deductive method are secured, and by which its results are verified. On the other hand, it is the method by which important facts are ascertained to which the deductive method cannot as yet be applied. The importance of carefully ascertaining the premises that ought to be adopted in deductive reasoning was very much overlooked by the earlier economists. They seemed frequently to get their premises out of the air without any preliminary investigation. Similarly, they tended to be rather remiss in the verification of their results. But perhaps their chief error lay in the tendency to overlook the importance of those elements in economic life to which the method of deductive inquiry is not at present applicable—*e.g.* to the study of consumption, and to the investigation of special economic forces,—as, for instance, that of custom—operative at particular times and places. Their errors in these respects have been well emphasised by the historical school. It is perhaps worth

noting that Carlyle also, in his less scientific way, brought out the importance of inductive inquiry. In chap. ii. of his essay on "Chartism" he suggests a number of statistical inquiries with respect to the condition of the working classes, which would form the basis for a line of inductive investigations. It must be confessed, however, that inquiries of this kind have not as yet furnished us with much definite light either on economic tendencies or on methods of practical reform. But there is every reason to hope that they will be more fruitful in the future. And if the results of the deductive method have hitherto been more imposing, they have probably also been more misleading. The careful inquiries set on foot by such writers as Le PLAY or Mr. Charles Booth can hardly fail in the end to be both light-bearing and fruit-bearing. This is especially the case when such inquiries are conducted in accordance with the principles of the HISTORICAL METHOD. In economics, as in other sciences that deal with life, the genetic method combines, to a large extent, the advantages both of deduction and of induction.

[Further information with regard to the inductive method will be found in most systematic treatises on political economy, as well as in works on inductive logic.—Wagner's *Lehr- und Handbuch der politischen Oekonomie* is specially instructive (3rd edition, 1892, pp. 194-225).—Dilthey's *Einkleitung in die Geisteswissenschaften* may be found suggestive.—Reference may also be made to the various works mentioned at the end of the article on DEDUCTIVE METHOD (see also HISTORICAL METHOD; STATISTICS, etc.).] J. S. M.

INDUSTRIAL COLONIES. The proposal to found industrial colonies owes its origin to two causes. *First*, the real or supposed existence of a class whose poverty or destitution results from want of employment, whether the cause of that want be incompetence, vice, the state of production, or overpopulation. *Secondly*, a tendency on the part of population to flock into the towns, swelling the numbers of the above class. Hence, the object of such colonies may be said to be twofold, to prevent unemployed labourers from drifting into a state of vagabondage, and to raise the vagabond class to industrious independence.

Historically, we find these causes playing a part in Greek colonisation, which was closely bound up in the population question, and in those Roman settlements which represent an attempt to solve the agrarian difficulty. In modern times several experiments have been made. In Holland the scheme of planting out the unemployed population of towns in the country dates from 1818, and has taken two forms. (1) The semi-penal colonies of Veenhuizen and Ommerschans, which are supported and controlled by the state, and to which vagrants are sent by order of the magistrate. (2) The colonies founded and maintained by charitable societies at Frederiksoord and

Willemssoord, in which the destitute are trained in habits of industry by a carefully graduated system of charity and self-interest. In Germany, since 1882, charitable societies have adopted the system as a means of reclaiming the vagrant class by an opportunity of steady work and self-improvement. The introduction of the system into this country would be to carry out the spirit of the Elizabethan poor-law, which directed overseers to set the able-bodied poor to work. But to organise such employment has been found impossible. The parish farm, the "roundsman" system, were attempts to remedy destitution by "finding work," that is, by paying out of the rates for work which does not pay in itself. "Every device for relieving the poor by means of employment must prove illusory in the end, excepting where it is connected with the development of fresh resources for the remuneration of industry." The foundation of labour colonies by County Councils has (1906) been urged as a means of dealing with vagrancy; a departmental committee is investigating the question.

[H. Mills, *Poverty and the State*, 1887.—*Essays on the Principles of Charitable Institutions*, 1834.—*Charity Organisation Review*, Jan. 1888. Holland, *Poor Law Conferences* (W. Midland), 1887.—*Methods of Employing the Unemployed* (Bd. of Trade, Labour Dept., 1893, for complete bibliography).—Mavor, *Labour Colonies*, 1892.—"General" W. Booth, *Darkest England Social Scheme*, 1892, for working of his farm colony.] L. R. P.

INDUSTRIAL COLONIES (BELGIUM). The present agricultural beneficent colonies of Belgium are the survivors of six state provincial *Dépôts de Mendicité* and two state-aided colonies of the private *Société de Bienfaisance* all existing in 1831. The two latter are extinct, and three of the former are closed. There remain—(1) a *dépôt* at Bruges for women and girls above eighteen; (2) an agricultural school at Reckheim for pauper lads aged fifteen to eighteen; and (3) the agricultural colony at Hoogstraeten, to which have been added the old Dutch colonies of Merxplas and Wortel, taken over by the Belgian government in 1870 at a cost of 800,000 francs (about £32,000).

The colonies are under the control of the department of justice. They comprise (a) a non-able-bodied colony, Hoogstraeten, extent 270 acres, accommodation 1300; (b) an able-bodied colony, Merxplas, 180 acres, accommodation 3600; and (c) working ground, Wortel, for the latter, 1410 acres. The total stock comprises about 40 horses, 320 cattle, 140 pigs, and 230 sheep. The area is thus allocated, viz.—arable and pasture 910 acres, heath 245, roads 320, buildings and gardens 74, with some fir-wood and uncultivated. The staff consists of 76 persons, besides farm-servants, master-millers, bakers, gardeners, and foremen, and about 140 soldiers. In October 1890 the total population, excluding staff, was 4000, of

whom 2800 were able-bodied. The daily cost per head was about 65 centimes for an able-bodied, and 85 for an infirm person (about 6½d. and 8½d.). The inmates are all adult male vagrants and mendicants sentenced by police courts. They are classified according to ability and character, the classes being kept quite separate. The buildings were erected by colonist labour. The work comprises plaiting, spinning, metal lattice-work, embankment, scavenging, farm and garden work, forestry, brick and tile making, building, carpentry, joinery, etc., and necessary domestic labour. It is allotted according to classes. The colonists are allowed to earn money, of which two-thirds are paid to them on discharge: the earnings vary from 15 to 18 centimes *per diem* (about 1½d. to 1¾d.). It is a leading principle that all trades shall be encouraged, and many skilled tradesmen are among the staff. The presence of many good colonist workmen is accounted for by drink, according to the officials. The products of the work are partly taken by government and partly sold outside.

Recidivism is the rule: in December 1890, only 247 out of 4213 colonists were there for the first time. The general conduct is said to be good. The punishments are cells, or transfer to a lower class. The sanitation is good.

The labour of the colonists does not nearly pay for cost of maintenance. No precise accounts were, however, obtainable in 1890. The colonies appeared to be excellently managed: the question of cost and of reformatory success being the two chief points open to doubt.

[H. G. Willink, article in *Charity Organisation Review*, Jan. 1891, "Agric. Ben. Col. of Belgium."—George Nicholls, *Report on the Condition of the Labouring Classes, etc. in Holland and Belgium*, May, 1838.—Mavor, *Labour Colonies*, Board of Trade Labour Department; *Blue Book on Employment of Unemployed*, 1893.] H. G. W.

INDUSTRIAL COLONIES (GERMANY). The *Arbeiter Kolonie* has three distinctive features. It grew out of the conviction that for the treatment of the defective classes employment in the open air was advantageous. It was founded by a religious body as "a work of free compassion." It was established on the principle that work should be provided for the unemployed instead of other forms of relief. The farm or colony system had in 1834 been adopted by Dr. Wichern at the *Rauhe Haus*, Hamburg. This institution, originating in a home for boys, became afterwards a settlement of homes, including a training home for a brotherhood of men to be engaged in the work of practical charity. Out of this movement sprang the *Innere Mission* (1849). One of its branches was at Bielefeld, where in 1866 a colony for epileptics was opened. In 1872 Dr. von Bodelschwingh was placed in charge of this colony. In 1882 he applied the colony system to the problems of vagrancy and

bought an estate at Wilhelmsdorf near Bielefeld for the purpose of employing vagrants on the reclamation of the land. He argued that on this method half the cost of the vagrants' maintenance would be met, many would be deterred from vagrancy, a check would be put on indiscriminate almsgiving, and those who remained in the colony three or four months would learn the new trade of working on the land, and might "return to the life of a citizen." There are now 26 colonies, 8 Roman Catholic, the rest Protestant. Two are in towns; the rest are farm colonies. All are under the supervision of the *Centralvorstand deutscher Arbeiter-Kolonien*. In connection with them are lodging-houses (*Herbergen zur Heimat*) 426 in number, where the wayfarer or vagrant can obtain food and lodging at low rates; and, in many instances, relief stations (*Verpflegungsstationen*), where he can obtain relief in return for a task of work. Of these there are about 1900. These lodgings and stations are placed at intervals along the main routes. By German law vagrancy is a punishable offence. The wayfarer in self-justification may produce a way ticket (*Wanderschein*), which is checked as he passes from place to place, and by which he is obliged to travel according to a certain route. Arrived at the "colony" the police make inquiries about him. He is set to work. After fourteen days he receives, in addition to his maintenance, 2½d. to 3½d. a day. If he wants clothes he is supplied with them. The price is stopped out of his wages, though he often leaves before his payments are complete. Any able-bodied man wishing to work is admitted. Habitual drunkards are excluded. Dismissal is the only form of punishment. The "colonies" were established and are supported by grants from state and local authorities and by subscriptions. Their produce is chiefly consumed within the colonies. On the statistics of the colonies the works of Dr. Berthold, the most important writer on the subject, give the fullest information. There are about 8000 persons admitted in the year. The vagrants in Germany have been estimated at 150,000. Of these more than half are in the prime of life, 25 to 45. About 79 per cent represent themselves as single. About 76 per cent have been in prison. About 44 per cent are unskilled or partially skilled labourers. About half have been in the "colonies" more than once. Many return to them frequently. In the winter the "colonies" are full to overflowing. In 1890 about 3500, in 1891 nearly 2000, were turned away. The pressure lasts during the winter. About 64 per cent leave of their own wish: about 19 per cent—a decreasing number—obtain situations. As to results: prosecutions for vagrancy have decreased from 23,093 (1880) to 13,583 (1890). The colonists are kindly treated and work fairly well. Employers are disinclined to take men

from the "colonies." Many who find situations do not keep them. Better-class men think it a reproach to enter them. As a cure for these evils, Dr. Cronmeyer proposes a combination of the "industrial colonies" with "home colonies" (see below) for the industrious and reformatory, or penal colonies for those who require more strict supervision or punishment. Dr. von Bodelschwing proposes (1) larger establishments in the towns to equalise the pressure; (2) a system of asylums for the incapable and crippled; (3) temporary colonies in bad years. Professor J. Mavor (Report, Labour Department of Board of Trade, C. 7182 (1893)) has dealt very carefully with the economic questions of the colonies. He says: "It is because the colonist is non-efficient that he does not compete with the labour market." But if this be so, a chief aim of the system, when established (see above), is not fulfilled. Next the supply of winter board and lodging should have the effect of reducing the relatively higher wages of unskilled labour in summer trades. Lastly, although the numbers concerned are relatively small, yet the minimum subsistence wage fixed by the colony for the purpose of inducing men to seek outside employment, may tend to some extent to become the maximum wage for low-grade labour in the district (p. 285). A home colony has been established at Bremerhaven. Colonists are there at first lodged in barracks, then in family cottages. There are twelve families. At this colony there is a considerable deficit, made good chiefly by voluntary contributions.

In the colony for epileptics at Bielefeld are about 1100 patients, under the care of Westphalian deaconesses and brotherhood. Adults and children are admitted, and may remain even when the epilepsy has terminated in imbecility or insanity. Admission is chiefly by payment on a graduated scale of charges. About 75 per cent of the patients are of the lower classes. They live in houses dotted about in the neighbourhood. Each house is under separate supervision, under the charge of a house father or mother. At different houses are different workshops. The colony with its church, etc., forms a society within itself. Expenditure about £31,000, of which about £1200 from patients' payments; the rest, grants from local authorities and contributions.

The test of a system for dealing with vagrancy is whether it assists those whom it relieves to return as soon as possible to self-supporting work in the open labour market. There is probably in all modern communities a substratum of vagrancy which cannot be removed. In times of industrial pressure this is increased by recruits from the ranks of inferior and usually unskilled workmen, who are the first to be discharged when fewer hands are employed. A good system would offer the minimum attraction to these to become permanent vagrants. There are two methods of

relief: (1) to employ and to endeavour to reform character or improve capacity; (2) to relieve under conditions of wholesome deterrence. The former is the German system. But the statistics do not seem to show that much is accomplished by way of reform. The latter is the English method; it makes no direct attempt to reform, but relies on the applicant preferring to gain his own livelihood to accepting relief on unattractive conditions. The result may be tested in two ways. Is the number of vagrants supported in winter large as compared with those supported in summer? If so, the system is used as a means of partial dependence by the habitual vagrant. Next, is vagrancy on the increase? In Germany the winter and summer number of the colonists varies widely. In England the winter and summer numbers of vagrants relieved by the poor-law vary comparatively little, except in a year of exceptional industrial pressure. Next the claimants for relief at the colonies increase yearly, though it may possibly be argued that the supply of necessary accommodation in Germany has not yet been brought to a level with the requirements, and hence a continual increase for the present may be expected. This contention apart—it would seem that the system draws the vagrant into dependence instead of preventing or reforming his vagrancy. In England, vagrancy seems to fall and rise quickly according to the industrial state of the country. If this be so, it is probably due in part to the fact that the German system is one of relief by employment, with no deterrent conditions. The work is taken as a payment for relief given. It is not laborious and yet it seems to justify the request for relief. A large number therefore take it without dislike or scruple. And as this process goes on, the better-class men become reluctant to apply; and the worse in a manner appropriate the institution to their own purposes. The latter part of this criticism may be applied to the English system; but now in many parts of England separate accommodation, with cleanliness, decency, and freedom from intercourse with others, is afforded to vagrants, so that the self-respecting man can, if he wishes, keep to himself.

[For other colonies in Germany and elsewhere see *The Epileptic and the Crippled* (Charity Organisation Series).—For bibliography, see Professor Mavor's *Report*, p. 431. The following are selected: *Die Arbeiter-Kolonie*: monthly organ of the *Centralvorstand*, Bielefeld.—G. Berthold, *Die Entwicklung der deutschen Arbeiter-Kolonien*, 1885-86, Leipzig, 1887.—*Die Weiterentwicklung*, u.s.v. 1886-87, Berlin, 1889.—*Statistik*, 1887-89, Berlin, 1891.—*Die Deutschen Arbeiter-Kolonien*, 1889-91, Berlin, 1893.—E. Cronmeyer, *Eine Zukunft der Elenden*, Bremerhaven, 1893.—*Die Herbergen zur Heimat und mit ihnen verbundenen Verpflegungsstationen im Jahre 1891*, Bielefeld, 1892.—*Deutscher Herbergverein Jahresbericht 1893*, Bielefeld, 1894.—C. von Massow, *Die Natural-Verpflegungsstationen und die Nothwendigkeit ihrer Reform als Voraussetzung ihres Fortbestehens*, Bielefeld, 1887.—*Statistik der Verpflegungsstationen*, 1890. Count Rumford in Bavaria (1789) founded industrial colonies.]

C. S. L.

INDUSTRIAL COLONIES (HOLLAND).

There are two classes of colonies, the free colonies belonging to a charitable society, and the beggar colonies belonging to the state.

The original free colonies were founded in 1818 by a private society, *Maatschappij van Weldadigheid*, which was promoted by General van den Bosch, and was composed of a number of supporting districts, each entitled to have in the colonies as many families as it had contributed capital sums of 1700 guilders (say £140 each); and the district was liable for outfit, travelling, furniture, and incidental expenses. The idea of the founders of the society was that pauperism might, to a large extent, be prevented by providing agricultural training and employment for able-bodied, deserving, destitute persons.

By Dec. 1821, 121,000 guilders (say £10,000) had been thus collected, and 300,000 guilders (£25,000) borrowed: the number of buildings was 500; total population 2100. The colonies comprised about 3000 acres, chiefly heath-land, near Steenwijk, Drenthe, purchased at from 22s. to 30s. per acre. A quantity of land was afterwards bought at Wateren, but sold in 1859. The colonists were divided into 3 classes, viz. (a) families, (b) boarders, (c) orphans. Heads of families began as "labourers," with the prospect of rising to be "free farmers." Besides farming, the chief work was weaving, the products being sold to government. Colonists' earnings, over a certain sum, belonged to the society. In 1820 the society founded the beggar colony of Ommerschans in Overijssel, 1900 acres being granted by government; and soon afterwards another at Veenhuizen in Drenthe, 2380 acres being purchased. There were three main classes of colonists (a) persons committed for begging; (b) voluntary inmates; (c) old soldiers. By 1827 the population of Ommerschans and Veenhuizen together amounted to 4518, including officials.

The principal authority on the early history of both the free and beggar colonies is a report by Count Arrivabene embodied in a pamphlet by Nassau Senior, 1835. Mr. Senior himself considered failure inevitable.

During the next quarter of a century the colonies struggled on under increasing difficulties, caused partly by general bad management, partly by the hopeless insolvency of the beggar colonies. The society was repeatedly helped by the state, but matters grew worse until, in 1859, the government took over the beggar colony, exclaiming at the same time all moneys due to the state, and paying off also all the private debts of the society.

The authority for this period is Sir John McNeill's report, 1853, in which he unreservedly condemns both kinds of colony, the free colony because it did not foster self-reliance, the beggar colony because of its expense.

Since 1859 the free colonies have been more

carefully managed, though the main lines are unchanged, and they have not much altered in size. Much of the land is now comprised in six large farms managed by the society—manufactures have been established, a forestry department has been organised. Colonists keep all their earnings; piece-work has largely supplemented time-work; and there are now more “free farmers” than “labourers.” Still on an average not more than six fresh families are admitted annually; and the colonies are not self-supporting.

The beggar colonies have been gradually concentrated at Veenhuizen. In 1888 the population of Ommerschans was 400, with about 40 officials, and of Veenhuizen about 2020. Nine-tenths were persons under sentence for begging. The colonists are employed on agriculture and simple handicrafts. In 1886 only about one-third of all the expenses, amounting altogether to about 665,000 guilders (say £55,400), was met by the colonists' labour. Such labour is said to be very inefficient. The system is not deterrent, about two-thirds of the beggar inmates having been at the colony at least twice before.

For an account of both kinds of colony in the present day see Mr. Willink's articles written in 1888. He considers that the free colonies, good as their work may be, do not annually deal with enough fresh cases to furnish a solution of the problem of the indigent poor, however beneficial they may be to their limited number of inmates: and that the beggar colonies are not successful either as a deterrent, or from an economical point of view.

[Nassau Senior, *Statement of the Provision for the Poor, etc., in America and Europe* (Fellowes, 1835).—Mary Hennell, *An Outline of various Social Systems* (Longmans, 1844).—George Nicholls, *Report on Condition of Labouring Classes, etc., in Holland and Belgium*, May 1838.—Article in *Quarterly Review*, Dec. 1835.—Eighth Annual Report of the Board of Supervision for the Relief of the Poor (Scotland), containing Report by Sir J. McNeill, 1853.—Herbert V. Mills, *Poverty and the State*, 1886.—W. Tallack, article in *Public Opinion*, 1st Oct. 1886, and article in *Leisure Hour*, Feb. 1887.—H. G. Willink, *Dutch Home Labour Colonies*, 1889.—Mavor, *Labour Colonies*.—Board of Trade Labour Department Blue Book on *Employment of Unemployed*, 1893. Labour Commission—Foreign Reports.] H. G. W.

INDUSTRIAL EDUCATION IN ENGLAND is not, as in France, Germany, and other countries, entirely a government concern. Apart from the government science and art department which has its headquarters at S. Kensington and at the School of Mines in Jermyn Street, in connection with which evening classes and examinations are held throughout the country, industrial education in England is—quite characteristically—almost entirely promoted by charitable endowment and by local or private enterprise. By far the

most important and recognised factor in its promotion is the City and Gilds of London Institute which not only provides, but subsidises other establishments which are providing, sound technical instruction, and encourages in the principal industrial centres of Great Britain the formation of evening classes for workmen and foremen. The Clothworkers' Company are also working in the same direction, and the other great livery companies of London are being pressed to expend a portion of their wealth in furthering the same object.

The universities of Oxford and Cambridge, London and Manchester, and the university Colleges of London and elsewhere, are giving great attention to science and art as applied to industry. But what is even more important, the county councils and municipal councils of the country are taking up the matter with a keen interest.

Elementary technical education both for girls and boys has now for many years been introduced into the curriculum of the elementary day school. Evening classes, usually in connection with the government science and art department, are held; and continuation schools are being provided in the higher-grade schools instituted in the larger industrial centres. The royal commissioners in their report of 1885 on technical education, deplore that England is singularly lacking in continuation schools of this kind; but an effort is being made to supply this want, especially in Manchester and other industrial centres.

Bristol and Birmingham are paying great attention to the subject of primary and secondary technical education. In Liverpool the late school board, by the introduction of elementary technical instruction, attempted to connect the primary with the secondary schools. In Manchester, besides the higher-grade schools before mentioned, there are several technical schools for artisans. Oldham has a school of science and art with evening classes adapted for the technical instruction of young men engaged in the various mechanical and textile works of the neighbourhood, particularly machine construction and the manufacture of cotton.

Of secondary technical schools and colleges the most important and best endowed is the Finsbury Technical College, established in 1883 by the City and Gilds of London Institute, as a model trade school for instructing artisans. Only second to this are Firth College, Sheffield, and University College, Nottingham; which both receive grants from the Institute. These colleges are furnished with workshops and laboratories and possess every appliance for the illustration and application of industrial methods in carpentry, building, engineering, chemistry, dyeing, art designing, carriage

building, metal plate work, and many other branches of trade and industry.

In special weaving and dyeing schools the commissioners found England very deficient as compared with France and Germany, but they bestowed unqualified praise on the Yorkshire weaving schools of Leeds, Bradford, and Keighley, all which are largely supported by grants from the Clothworkers' Company. The Leeds school was erected by the company at a cost of £15,000. There is also a fine weaving school at Glasgow.

Many other institutions, such as the London Polytechnic, the Royal Engineering College at Cooper's Hill, the Royal Naval College, Greenwich—especially adapted for the study of ship-building—and the Crystal Palace School of practical engineering—exist, where instruction is given in every branch of trade and industry.

As specimens of private voluntary enterprise in this direction mention must be made of Messrs. Mather and Platt's workshop school at Salford, maintained at their own charge for the technical education of their own workers. At Cambridge the commissioners were particularly struck by the mechanical workshops, instituted by Professor J. Stuart, to enable the sons of manufacturers and others to combine with university training instruction of a kind immediately practicable to their calling. The special feature of the Allan Glen's Institution at Glasgow is workshop instruction. Ireland appears to be somewhat deficient in evening classes for artisans, but in the reformatory and industrial schools of the religious brotherhoods and sisterhoods, boys are instructed in a variety of trades, and in every department of farming and gardening. Also many of the Irish national schools have school-farms attached. In addition to this, the Grocers' Company support a school of agriculture at Templemole; there is also the Albert National Agricultural Training Institution at Glasnevin, with three farms attached, and there is the Munster Dairy School.

Ireland is more advanced in this branch of instruction than England. The English government, except by the S. Kensington examinations, has done little or nothing to promote agricultural education. The few schools that exist are self-supporting. The Royal Agricultural Society of England, and the Highland and Agricultural Society of Scotland, encourage this branch of study by acting as examining bodies. The Scottish society makes a special branch of forestry, with drainage, fencing, bridge building, and the chemical knowledge of soil properties.

Among the agricultural establishments in England, the Royal Agricultural College of Cirencester, organised by the Farmers' Club, holds the first place. The college farm consists of 500 acres devoted to arable, pasture,

and dairy farming; and it also possesses botanic gardens. Excursions are made by senior students to the neighbouring farms and herds. In 1880 the Downton Agricultural College, Wilts, was opened on somewhat similar lines.

Agriculture is also included in the curriculum of the county schools. Some years ago an attempt to open a British Dairy School failed, but the effort is illustrative of a felt want of some such institution.

Perhaps the most interesting and instructive institution for the analytic and scientific study of farming and agriculture is the private experimental station at Rothamsted, established by Sir J. B. Lawes. Minute investigations and comparisons of soils, manures, crops, and pasture are made. Experiments in stock feeding and stock breeding are carried on upon a most extensive and elaborate scale.

In conclusion the commissioners found that although the British government has almost entirely neglected the technical education of agriculturists, it has made an effort by its examinations to spread a book knowledge of agriculture.

[*Report of the Royal Commission on Technical Education, 1885.*]

A. L.

INDUSTRIAL EDUCATION IN THE UNITED STATES. Education with special reference to the economic life of the people is being promoted in the United States in three different ways: (1) A general introduction of what is termed manual training in the public school system of the large cities; (2) in the establishment of trade schools; (3) in the founding and endowment of higher technical schools and colleges which include a specialised education for the direction of manufacturing, mining, and agricultural industries. With regard to the first experiment, manual training, it is to be observed that it is not artisan education. It "signifies instruction in tool work as an educational discipline." This training, if grafted upon the public school system, is generally taken in connection with the high school studies, and consists in exercises in drawing, modelling, and wood-working, with sewing and cooking for girls. In some of the larger schools which have private endowments, as at Chicago and St. Louis, the course of study embraces pattern-making, foundry-work, forging, and machine shop-work. Manual training as an educational method is largely the growth of the past ten years. There is no uniformity in these schools in the different parts of the country, and some of them are so far developed that they may be regarded as "schools of apprenticeship, though the brief courses pursued in them seem wholly inadequate for the mastery of any trade."

Of the trade schools, there are as yet but few. The best known and most successful is that

established by Col. Auchmuty at New York. Here instruction for fees is given in bricklaying, plastering, plumbing, carpentry, house, sign, and fresco painting, stone-cutting, blacksmithing, tailoring, and printing. A few large manufacturing establishments and railroads have specialised schools for instruction in particular artisan work; and training of this character is being incorporated into the discipline of the better reformatory institutions for youth and men, as at the Elmira Reformatory. All these distinctively serve as apprenticeship schools.

Institutions of the third class include—(a) agricultural colleges founded since 1860, for the most part under endowments of the national government, and generally attached to a state university for its administration; and (b) institutes of technology for the special education of engineers, architects, and chemists. Colleges and state universities have also very generally introduced similar training into their curricula.

[See *Eighth Annual Report of the United States Commissioner of Labour, 1892.—Industrial Education*, Washington, 1893, pp. 707. This contains a valuable bibliography of twenty pages, relating to the subject of technical training in the United States and Europe.] D. R. D.

INDUSTRIAL PARTNERSHIP. This term is generally used of a system of industry under which the employer is so far in partnership with the employed that he accords to them a share in the profits which are realised (see PROFIT-SHARING). It has been more widely adopted abroad than in England, and it has there been applied to a variety of industries. The term is sometimes also employed of a system by which the actual workmen take upon themselves all the responsibilities of management, and endeavour to eliminate the employer entirely, and secure for their own advantage the whole of his profits. But this latter system is more usually called co-operative production (see CO-OPERATION) and the term "industrial partnership" confined to the system which was first mentioned. This system possesses advantages over that of co-operative production, because the workmen enjoy the benefit of a share in the profits, and the stimulus of an interest in the success of the undertaking, without ceasing to avail themselves of the advantage of the experienced and interested management of the employer (see EMPLOYERS AND EMPLOYED). It has been asserted that the system leads to an increase in wages by the addition of the share of profits which is distributed without occasioning any encroachment on the gains of the employer. It has been affirmed that this is the case because the workmen are rendered more careful in the avoidance of waste, are less disposed to listlessness or idleness, and require less constant and watchful superintendence. The system has been applied with three main varieties of method.

The share of profits is sometimes given wholly in cash, sometimes it is set aside or invested in order to secure a provision for the old age or sickness or death of the workman, and sometimes it is treated partly in the first, and partly in the second manner. The difficulties of adopting and working the system may be said to consist partly in the possible inconvenience of a wish on the part of the men to interfere in the details of management, partly in their probable disinclination to share in losses as well as in profits, and partly in the absence in some trades of an opportunity for making a fresh addition to profits through the avoidance of waste or of idleness. Its advantages are summed up in the feeling of joint interest in the success of the concern which it tends to create between masters and men. The system is perhaps best known in connection with the successful trial of it made by the Parisian house-painter, M. LECCLAIRE (*q.v.*).

[The system of profit-sharing, or industrial partnership, is thoroughly examined, and the instances of its application recorded and investigated in detail, in N. P. Gilman's *Profit Sharing between Employer and Employee*. A shorter account is given in Sedley Taylor's *Profit Sharing*; and notices of the system are contained in Babbage's *Economy of Machinery and Manufactures*, under the heading "A new system of manufacture"; in J. S. Mill's *Political Economy*, bk. iv. ch. vii. § 5; Fawcett's *Manual of Political Economy*, bk. ii. ch. x.; Jevons, *State in Relation to Labour*, ch. vi., and *Methods of Social Reform*, p. 122; and Cairnes's *Essays in Political Economy*, No. v.; cp. Robert, *La Participation aux bénéfices*; also Schloss, *Methods of Industrial Remuneration*; and B. Potter, *The Co-operative Movement*, for criticism of the system (see *CITÉ OUVRIÈRE: FAMILISTÈRE; GODIN; COPARTNERSHIP, App.*)] L. L. P.

INDUSTRIAL RÉGIME is a phrase which only now appears to be in process of crystallisation into a definite use in economic language: and we can hardly define it satisfactorily without sketching the history of the term so far as we can trace it. In 1821 St. Simon wrote his treatise *Du système industriel*: he did not, so far as we can discover, use the phrase under discussion; but he and his followers used *l'industrialisme* to indicate at one time generally the modern industrial organisation, at another time the particular industrial organisation which they advocated. Probably through Comte the idea passed into the works of Herbert Spencer, who distinctly opposes modern "industrialism" to mediæval "militarism," and uses the phrase "militant régime" but not its implied opposite (*Data of Ethics*, ch. viii., etc.).

Apparently the actual phrase is quite modern, and Sir R. Giffen seems to have been one of the first who adopted it; he includes, under the general term "industrial régime," all those

phenomena which go to make up the economic stage: in other words, "the sum of the chief features in the industrial organisation of a country like England." But the particular organisation of industry in England differs not merely in degree, but to some extent also in kind, from that of many other civilised communities; and this fact leaves the meaning above attached to the phrase indefinite. Out of this arises an application of the term "industrial régime" to particular forms of industrial organisation—*e.g.* competition as opposed to socialism—the system of large tenures as opposed to peasant properties. Here the term becomes even more vague. We should hesitate to deny to the most strictly socialistic régime the title to be called industrial, especially when the phrase now in question had its birth in a communistic writing.

Clearly the simplest signification to affix to it would be that of the industrial organisation of any country, however rude, as opposed to mere nomad and marauding existence. In this case the industrial régime of any country will be the sum of its industrial features, and will vary with the state of economic development. C. A. H.

INDUSTRIAL REVOLUTION, THE. At the close of the 18th, and the opening of the 19th century a change, or rather a series of changes, passed over the agricultural and manufacturing industry of England, which has been aptly described by the name of the Industrial Revolution. The changes which then took place were of considerable magnitude, and the conditions of industry, both in manufactures and in agriculture, may without any great extravagance be said to have been revolutionised. Until this time the general character of industry in England presented broadly the same features as those which it had exhibited during the greater part of the middle ages; and from that time the commencement of our modern system of industry dates. **AGRICULTURE IN ENGLAND** (*q.v.*) and manufactures alike were then generally prosecuted on what we should term primitive and unsystematic methods. Men were raising complaints that half the land of the country was waste. The size of the farms was small, and the method of cultivation unscientific. In many parts of the country there were still open unenclosed fields; in nearly all there was an absence of any proper system of rotation of crops, and of turnips and artificial grasses. Quarrels were continually arising about the rights of pasture on the common meadows, and about the boundaries of the many scattered minute parcels of land of which an individual's holding was made up.

Nor was the position, or character, of manufacturing industry different. It was carried on, with few exceptions, by craftsmen working with their own hands in their own homes (see **DOMESTIC SYSTEM OF INDUSTRY**), although

even then there were exceptions, for some capitalist employers existed, and some factories had been built by the middle of the eighteenth century. The mechanical appliances and tools which the craftsmen used were generally of a simple and rude description, and the number of persons working under their direction was small. The apprentices (see **APPRENTICESHIP**), limited in number and term of service, and the **JOURNEMEN** (*q.v.*), with their wages fixed, in theory if not in practice, by the magistrates, lived in the house, and ate at the table, of the master-craftsman. Employment, such as it was, was regular; fashions varied slowly and slightly; and men produced in the main, though not exclusively, for a market which was close at hand. They were intimately acquainted with the conditions of that market, and the state of the roads was such that intercourse and trade with distant towns were rendered difficult. The workman who ventured to move from one town to another was not merely liable to be sent back to his original abode under the law of settlement (see **SETTLEMENT**; **POOR LAW**), stigmatised by Adam Smith (*Wealth of Nations*, bk. i. ch. x.) as an "evident violation of natural liberty and justice," for fear that he might eventually come upon the rates in his new dwelling-place, but he might also be excluded from employment by the restrictive privileges of some exclusive trade corporation which were, in Adam Smith's words, a "plain violation" of that "most sacred and inviolable property which every man has in his own labour." The goods which the craftsmen made were often taken to the halls of the different corporations to be stamped as genuine. The woollen industry was now, as it had been for a long time previously, the staple industry of the country, and was carried on at Norwich, and in the west of England, and the west Riding of Yorkshire. The iron industry, which was prosecuted in Sussex, where the iron was still smelted by charcoal in small furnaces blown by leathern bellows worked by oxen, was said to be gradually dying out; and the cotton industry was so insignificant as to be mentioned but incidentally, by Adam Smith, who lived on the very eve of the industrial revolution, and himself, perhaps, assisted in affording a shelter within the walls of Glasgow University to James Watt, the inventor of the steam-engine, seeking protection from the exclusive tyranny of the local corporation of hammermen, who had refused to allow him to practise his trade. Adam Smith declared that there had been only three inventions of note in the cotton industry for the space of three centuries. Banking was as yet in its infancy, and the Bank of England did not issue notes of a lower denomination than £20. The external commerce of the country was hampered by a number of vexatious restrictions, and duties on imports and

bounties on exports abounded, while the colonies were regarded as a field for the commercial monopoly of the mother country. Such was the general condition of affairs before the changes which introduced the modern industrial system. Those changes were bewildering in their magnitude, and, to some extent also, in the rapidity with which they were effected. Agriculture underwent a transformation, the chief part of which, however, seems to have been accomplished in the earlier half or two-thirds of the 18th century. Large farms began to take the place of small farms. The inclosure of the open field was actively prosecuted, and sometimes injustice was done to the rights of the smaller commoners. Scientific cultivation was substituted, in a more or less considerable degree, in different parts of the country, for primitive methods. Bakewell improved the breed of cattle. Townshend—"Turnip Townshend" as he was nicknamed—introduced the cultivation of turnips. Coke at a later time devised an improved system of rotation of crops. But in manufacturing industry the changes were more revolutionary, and they occurred in the latter part of the century. Four great inventions were made in the cotton industry—that of the spinning-jenny by Hargreaves; that of the water-frame by Arkwright; that of the mule by Crompton; and, the most considerable and important, in its consequences to the old handicraft occupations, of all, that of the power-loom by Cartwright. This last invention dealt a fatal blow to the fortunes of the old hand-loom weavers, and their distress has furnished a stock illustration of the temporary misery which may be occasioned by the introduction of machinery, at any rate to those workmen the labour of whose hands it supersedes. But other industries besides that of the manufacture of cotton were affected by the changes of the times. The smelting of iron by coal was introduced by Roebuck, and the decaying iron industry revived, and abandoned the charcoal forests of Sussex for the coal seams of the north and the Midlands. Canals, such as the Grand Trunk connecting the Trent with the Mersey, and the Grand Junction, which afforded the means of communication between London and the chief towns of the Midlands, were constructed under the direction of the inventive genius of Brindley, and the roads of the country were improved under that of Telford. Mills were erected on the banks of rivers in order that use might be made of the water-power which was there available to drive the new machinery, and then came the most wonderful and important discovery of all—that of the steam-engine, to be followed in its turn by the railway. All these changes gave a great stimulus to the production of wealth and the growth of population. They kindled a spirit of eager and restless enterprise, which was sometimes inclined

to be reckless of injury occasioned to human life and health, and to give little consideration to the wrench to human affections which was not infrequently the consequence, direct or indirect, of the changes. For trade passed from quiet villages to noisy towns; from the home of the handicraftsman to the factory of the employer; from the master, who lived together with his apprentices and journeymen, and was in general "so joined together" with them in "sentiment" and "love that they did not wish to be separated if they could help it," to the employer who had hundreds of "hands" working under him, whose very faces he might not himself know. Division and subdivision of labour (see DIVISION OF LABOUR), organisation and localisation of industry, were carried out on a scale, and to an extent, unknown before. Master-merchants and wholesale dealers arose. Manufacturers began to produce for distant and fluctuating markets, and to crowd into, and dismiss from, their factories, as the changing demands of varying trade required, multitudes of men, women, and children. There seems to be reason for believing that something like a regular system of transporting children from London to the new manufacturing districts of the country was in operation; and there is unfortunately no doubt that the greed of parents joined with the eagerness of employers to increase the number and intensify the labour of the young apprentices in the factories. Population was stimulated by the lax administration of the poor law, and by the numerous chances of earning a livelihood which presented themselves; and was, so to say, torn up by the roots from its old abodes, while the industrial world was pervaded by restless movement. The workmen were forbidden by law to combine with a view to the regulation of trade, but, under the guise of friendly societies, they formed themselves into TRADE UNIONS (*q.v.*), and attempted in certain trades to restore the old system, by which the number of apprentices was limited, and the magistrates determined the rates of wages. They failed ultimately in this endeavour; but they did not cease to maintain, under circumstances of difficulty, their unions; and the state, by its FACTORY ACTS (*q.v.*), placed restrictions of increasing rigour and comprehensiveness on the employment of women and children. The industrial revolution was undoubtedly a time of great distress, which may have been increased by the CORN LAWS (*q.v.*) preventing the importation of food from abroad to make up for the scarcity occasioned by bad harvests at home, and by the depression of trade which followed the close of the great war. The financial demands of the war combined with the opportunity afforded to England to supply the commercial wants of the continental nations, in whose country, and by whose soldiers the war was chiefly prosecuted, to stimulate increased

production; and the brilliant series of inventions which were made towards the close of the last century, permitted the stimulus to be effective. The pressing need of the time seemed to be that of increased production; and the nation was less inclined to regard those permanent interests, which might have been consulted by greater consideration for the health and the education of the young, than to promote the obvious and immediate interests of the moment. The industrial revolution may be said to cover the period embraced by the writings of the three great older economists, ADAM SMITH, MALTHUS, and RICARDO (*q.v.*). The first lived on the eve of the revolution, amid the relics of the routine and regulation of a former era. The second lived in the midst of the revolution, and his writing reflected the gloom and despair of the time. The third lived towards the end of the revolution, and the assumption of a pervading competition, which is the basis of his reasoning, was not a wholly inaccurate representation of the actual state of affairs.

[For an account of the industrial revolution the student should consult Toynbee's *Industrial Revolution*, Miss Martineau's *History of the Peace*, and, for the evils of the old factory system, Karl Marx's *Capital*, which is, however, obviously biased.—For the struggle of the old trade unions, Brentano on *Gilds*, and Howell's *Conflicts of Capital and Labour*, are of use; and, for an account of the changes in agriculture, reference should be made to Prothero's *Pioneers and Progress of English Farming*, ch. iv.—Held, *Soziale Geschichte Englands*.—For much general information, Tooke and Newmarch, *History of Prices*, 6 vols.; cp. also W. Cooke Taylor on the *Modern Factory System*.—S. and B. Webb on *The History of Trade Unionism*.]

L. L. P.

INDUSTRIES, LARGE AND SMALL. One of the most marked tendencies of modern times in industrial matters is to increase the scale on which commerce and manufacture are conducted. The DOMESTIC SYSTEM OF INDUSTRY (*q.v.*) has given place to the FACTORY SYSTEM (*q.v.*); smaller factories have made way for larger establishments which really comprise several factories beneath one roof—for not merely are there separate rooms devoted to distinct operations, but there are sets of rooms so devoted—private ventures have been superseded by public COMPANIES (*q.v.*) controlling greater masses of capital, and employing greater numbers of workers; and various SYNDICATES (*q.v.*) and TRUSTS (*q.v.*) and other kinds of combinations have been formed. The use of steam as a motive power has probably contributed to this tendency to concentration of industry in large establishments, for it can only be generated in one spot and distributed over a small area. But there are other advantages possessed by the system of production on a large over that on a small scale, which have assisted the movement, and these would not cease to be opera-

tive, were steam replaced by some fresh motive power, such as electricity, which could be generated at a common centre and distributed by wires over a comparatively large area. These advantages may be classified under three heads: (1) *Economies of management*.—A large undertaking permits of a more systematic organisation, and a more thorough application of the principle of the DIVISION OF LABOUR (*q.v.*). It allows of a better arrangement of buildings and of mechanical appliances. It affords the opportunity for the experimental trial of new machinery, to the expense of which a smaller undertaking would be unequal. In all these ways it tends to economy, and in other ways also it effects a direct saving. "One high chimney can make a draught for a large furnace as well as for a small one; one door-keeper can admit five hundred men as easily as fifty." The different clerks, stokers, and mechanics can be kept more fully employed on their own special work in a large than in a small undertaking; and the employer at the head of a large establishment is able to devote his time and his thoughts more exclusively to the general direction and superintendence of the business. (2) *Economies of purchase*.—A large undertaking can generally buy what it requires on more advantageous terms than those enjoyed by a smaller undertaking. It can employ well-paid and trustworthy agents. It can draw its supplies from a wider area. It can obtain greater facilities for transport. It can buy in larger quantities, and can afford experimental purchases of machinery and materials. (3) *Economies of sale*.—Somewhat similar advantages belong to the larger undertaking in the matter of selling as in that of buying. It can push its wares by advertising and employing commercial travellers. It can secure the cheaper and more expeditious and efficient transport of these wares to their ultimate destination. It can ascertain the condition of remote markets. It can offer a more abundant variety of patterns and styles. It can perhaps inspire greater confidence in its customers. The advantages thus possessed by large over small undertakings are very great; and to them must be added the consideration that there are some enterprises the magnitude of which is such that they could not be successfully accomplished without the resources of capital commanded by a large trading company. The system of limited liability (see LIMITED LIABILITY ACTS) has permitted of the formation of these companies with comparative ease; and Professor Marshall has said (*Economics of Industry*, original edition, bk. i. ch. viii.) that "there does not seem to be any limit to the amount of wealth which a single trading company can profitably manage in a business which can be managed by routine, and does not require the bold enterprise and prompt decision of a

single mind." But there are, on the other hand, advantages which belong to small, and are not possessed by large, undertakings; and there are departments of industrial activity to which the system of production on a large scale has as yet been applied only in exceptional cases. Smaller subsidiary industries are continually springing up to supply some of the wants of the larger; and AGRICULTURE (*q.v.*) is, at present at any rate, following at a gradual pace in the steps of manufacture. The introduction of mechanical appliances is indeed advancing, and the larger farmer may possess an advantage over the smaller in the matter of the economical use of these appliances, and of his farm-buildings and materials and implements. He may, too, possess greater scientific knowledge, he may display more vigorous enterprise, he may command more abundant capital, and adopt a better rotation of crops. But, with all these unquestionable advantages, it is still the case that agriculture permits of less systematic organisation than manufacture, and of a less thorough application of the principle of the division of labour. The labourers must be scattered over the country, and they cannot be concentrated in masses as they are in the manufacturing centres. Their work varies with the seasons, and they cannot devote their entire energies to some small department of a great industry. And, again, the business of superintendence, and the advantage of unremitting personal watchfulness and close personal interest, are more obvious and important in agriculture than they are in most branches of manufacture. It is in this matter of superintendence and of personal interest that the small master enjoys a superiority over the large, and that the private venturer has a resource and a stimulus which can hardly be possessed, and are rarely exhibited, by the salaried officials of a public company. In industries, then, which demand the incessant vigilance of personal interest, and do not possess a market large enough to render profitable the thorough application of the principle of the division of labour, the system of production on a small scale has, even in manufacture, advantages over production on a large scale (see EMPLOYERS AND EMPLOYED; LIMITED PARTNERSHIPS, *APP.*).

[J. S. Mill, *Political Economy*, bk. i. ch. ix., and Marshall's *Principles of Economics*, bk. iv. ch. xi.] L. L. P.

INDUSTRY, CAPTAINS OF. This title has been sometimes given to the employers of modern industry. They have been regarded as the leaders of an industrial army, which is under their command, obeys their orders, and depends to a very large extent for success or failure on their judgment and enterprise. They have in a sense to determine on the plan of action, to organise its means, and to superintend its execution. The employer of older times

was a craftsman who lived and worked together with a small number of apprentices and journeymen (see DOMESTIC SYSTEM OF INDUSTRY), and produced his goods, frequently to order, and generally for a steady unchanging market close at hand. Now production is carried on in anticipation of demand, goods are made according to varying fashions of divers materials brought from remote countries, and they are sold at a distance from their place of production and often on credit. The scale on which business is habitually conducted has largely increased (see TRADE), and the number of persons working under an employer has grown together with the size of his factory. The difficulty and importance of the labour of management have undergone a corresponding extension, and the employer has become the most prominent and responsible personage in the world of industry. His authority is despotic, and his power for good or for evil immense. And, just as an army follows the directions, and depends on the generalship, of the commander, so the industrial army obeys the orders and relies on the ability and discretion of the employer, the captain of industry. It is this idea of leadership which has suggested the metaphor, together with the conception of the modern world of industry as the scene of the eager unceasing competition of rival armies of producers.

[For the function of the employer the books mentioned in the articles on EMPLOYERS AND EMPLOYED; EMPLOYING CLASS; and ENTREPRENEUR, should be consulted.] L. L. P.

INDUSTRY, ORGANISATION OF. The organisation of industry, unlike most forms of organisation outside the purely physical world, is not in any great measure due to the conscious endeavour of individuals; it rather grows out of the acts of people for their own ends. It thus contrasts with the organisation of labour (see TRADE UNIONS), and any other combination of the same class (as FARMERS' ORGANISATIONS, U.S., *q.v.*); for such organisations are deliberately formed for special purposes,—generally the defence of classes, interests, or industries,—and have definite aims in view. It is claimed by socialists and collectivists that under a socialist régime this organisation would be carried on with a particular aim—the development of the talent and energy of the whole community; that it would be controlled and regulated by the wisdom of the great body of the people; and that it would, therefore, apart from the special economic effects in distribution of wealth and labour, be more successful than it is at present, when it is dependent on the interests or caprices of individuals. On the other hand, it is maintained that under a system of individual freedom the energies of each are, by force of nature, driven into those channels in which they will be of most use; and that the machinery by which industry has come to be

regulated, though not the result of a definite scheme, is the consequence of principles of human nature which must always in the long run produce the most satisfactory organisation for the community, because ability and capacity are attracted to their proper channels. Whatever view is taken, it is certain that without organisation of one kind or another industry would now be useless and impossible; and the existing organisation is so deeply rooted that it would be difficult to do more than amend it in detail. It is part of the industrial life of every civilised nation.

The earliest phase, historically, of this organisation is what is called division of employments; and the earliest division of employments, like the origin of capital, is lost in the past. We find in some of the oldest records, however, that people are mentioned as engaged in certain specified employments. In the Pentateuch artificers in brass are named; and dyeing and weaving we read about as recognised occupations. There was also, at a very early period, a division between rural and urban forms of industry. The dynasty of Pharaohs, who befriended the Israelites, are understood to have been a race of shepherd princes or chiefs who were ultimately driven out by the later dynasty who held the kingdom in the time of Moses. The curious episode of the purchase and storage of grain by Joseph could only have occurred in a state of society where the town and the country had diverse industries and interests. The progress of industry among the Greeks and the Romans is not easy to trace: that the division of employments attained to a greater degree among them than with the eastern races is certain, but further than this it cannot be said that any organisation is traceable.¹ The division of employments was also retarded greatly by the use of slaves. The localisation of industry, with which we are now so familiar, is found only in its earliest form, where absolutely necessary;—as where precious metals were discovered, or a natural harbour existed, and a port created to serve the surrounding country. What in modern times forms one of the most important features in the organisation of industry—the massing the people engaged in the same employment or manufacture together in certain towns and districts, apart from natural or geographical causes, is a much later development. This phenomenon in the progress of industry is far more common in the present century than it has ever been before; it is, in fact, one of the predominant characteristics of the age we live in, though it is still capable of further development, if the same forces that have acted in the past continue to act in the

future. This great change is the result of the new physical forces which have come into operation; steam, electricity, and rapid means of carriage and communication.

In mediæval times, the organisation of industry was attempted to be carried out on a set plan in a far greater degree than in modern times. The whole series of associations, international, national, and local—as the HANSE towns, the STAPLE towns, the merchant and craft GILDS—were attempts made to organise industry through combination for the benefit of the whole association, and through it of each individual member. The unions in separate trades, existing when the means of communication was poor, and distance in space an almost insuperable barrier to the promotion of common interests, frequently caused a subsidiary localisation to take place, the remains of which are seen in the nomenclature of certain districts and streets in the large towns. In the city of London, the names of some streets still indicate the occupations of former occupiers. Prof. Ashley (*Economic History and Theory*, vol. i. p. 96) gives instances which could be multiplied readily in almost every city of considerable size and antiquity.

These localisations were not the result of the convenience to an individual of being in the neighbourhood of those in his own trade, an object which we are used now to see attracting men, but were part of a determined effort to produce an offensive and defensive union for the preservation and furtherance of class interests. If the trade was threatened, either by imposts of the government or by foreign competition, from other towns usually, or by defections from its own ranks, it was necessary to act in union; and to do this, the trade must be capable of being called together at the shortest notice. Again, if any member was threatened with injustice as an individual, it was important that all the trade should be ready to defend him, if need be, without delay. It is probable that this congregation of trades led by gradual steps to the modern form of grouping, by which industries become localised. In a great number of instances an industry becomes fixed in certain localities by some geographical or geological advantage. The mouth of a large river is naturally used for dock-yards and ship-building; the more easily coal can be conveyed, the more likelihood is there that such a trade will flourish. Of course the presence of coal-fields fixes the locality of a mining industry; and the neighbourhood of coal-fields assists in the rise of industries which constantly require a great quantity of fuel, such as iron and steel manufacture. In a greater number of cases, however, there is no determining cause of the kind we have mentioned, and the prevalence of a trade in any particular town or district is probably due to the indi-

¹ (See *Manufacturing Arts in Ancient Times*, by James Napier, London, 1874, for an interesting account of early localised industries.)

vidual enterprise of some one man. In this country, as in others, we have many examples of such apparently haphazard localisation. There is no reason in nature why china should be made in Dresden; nor why glass-blowing should be predominant in Venice, and carpet-making in Brussels. The lace manufacture in Nottingham, the former silk industry at Coventry, the shoe trade of Northampton, are all familiar instances of the same phenomenon. The origin of these particular local trades and others like them is interesting, but of no scientific value. What is of importance about them is the consequence that we have capital of the same class and labour of the same kind drawn together, with the result that the former, even where it is fixed or specialised, becomes more transferable and easier to realise, while the latter loses much of its natural immobility. The general wage in a trade is much more accurately known where the trade is largely confined to one district than where it is scattered over the country; and thus the remuneration of agricultural labourers, who belong to a trade in which localisation is impossible and organisation singularly difficult to obtain, has always exhibited a very marked divergence in different parts of the country, while the wages of coal-miners remain approximately the same in all different coalfields. From year to year the farm-labourer in Wiltshire goes on taking 30 per cent lower wages than the man who is doing the same kind of work in Yorkshire; but if a rise in wages is obtained by miners in one district, even of a small amount, those in the other districts immediately endeavour, through their unions,—and often successfully,—to obtain a like advance in their own rates.

The features of the modern organisation of industry which are the most striking and the most important are the specialisation of capital and of labour, and the interdependence of trades. The occurrence of these phenomena have, no doubt, led many thinkers of this century to discuss the question whether, when one group of labourers or capitalists depends so greatly on others over which they have no direct control, it is not possible and advisable to place the whole industry of the nation under some central authority; so that, as socialists say, it may be guided by reason for the common benefit, instead of by chance and caprice for the advantage of certain individuals. The cause of this mutual dependence is really, in one or other of its many forms, the tendency which Adam Smith named the *DIVISION OF LABOUR*. If we take any manufactured article, not of an elementary kind, we find that a perfect multitude of people have combined to produce it and bring it into the market where we find it; often the difficulty, in fact, is to find some class of labourers who have not had a hand in the business. Take such a commonplace thing

as a lead-pencil, costing a penny. In the making it, of course, the miners who dug the metal and the hewers who cut the cedar have been employed, besides the workers in the pencil factory who cut each into its proper shape. Then there are the men who compounded the mixture of glue used in cementing the pieces of wood together, and holding the lead fast. But this does not nearly exhaust all the labour concerned in the product. Machinery was required to dig for the lead, and coals were needed to keep in action the engines that drove the machinery. Coal-miners, smelters, iron-moulders, mechanical engineers had all a part, therefore, in the construction of the pencil; and not only they, but all the persons engaged in the industries necessary to feed the businesses of coal-mining, smelting, etc. Ships brought the wood of which the pencil was made, railways carried the lead; and, apart from all these, agriculture was required to produce the food which kept in life the various workers employed in all these industries. It would be impossible to apportion the part performed by each different class of labourers in the product, in the example given; but it serves to show the entire dependence of one industry on another, under the present system; and the means by which anything affecting in a permanent or serious degree one branch of trade is certain to exercise economic consequences on many others. It is this which embodies the real organisation of industry in modern times. It is the consequence, as the above illustration shows, of the manifold specialisation of labour and capital. It is probably to this phase of modern life, more than to any other, that we owe the growth of economics as a science; and it is in the fuller consideration of the mutual dependence of various forms of capital and labour on one another—what is called the social aspect of industry—that further developments of the science in all likelihood are to be looked for.

[Rogers, *Six Centuries of Work and Wages*.—Maine, *Village Communities*.—Ashley, *Economic History and Theory*. Also the *Report of the Royal Commission on the Depression of Trade*.]

M. G. D.

INFANTS. The civil law distinguishes two stages of infancy, the one previous and the one subsequent to the attainment of puberty. The distinction has been retained in many continental countries and also in Scotland, but English law recognises one stage of infancy only, viz. the whole time before the age of twenty-one. Infants are subjected to various disabilities (as to which see *DISABILITIES OF INFANTS*), and their persons as well as their property are frequently placed under the care of a guardian. This is always the case on the death of an infant's father. Before 1886 the testamentary guardian appointed by the father

was not in any way subject to the mother's control, but the Guardianship of Infants Act 1886 provides that on the death of the father the mother is to be the guardian either alone or jointly with any guardian appointed by the father. The mother may also by deed or will appoint any person to be guardian of her infant children after the death of herself and the father. Infants are but rarely placed under the guardianship of a third person during the father's lifetime, and the only procedure available for that purpose is an application to the Chancery division of the High Court; the court will not, however, interfere with the father's authority except on very strong grounds, as for instance habitual cruelty or immorality. Modern statutes have in various ways extended the legal rules for the protection of infants. Thus it is provided by the Prevention of Cruelty to Children Act 1889, that any person over sixteen years of age, who, having the custody of a boy under the age of fourteen years or of a girl under the age of sixteen years, wilfully ill-treats or neglects such boy or girl, shall be liable to a fine or two years' imprisonment with or without hard labour. This statute imposes punishments for causing children to beg or to be in any street or in any premises licensed for the sale of intoxicating liquor, "whether under the pretence of singing, playing, performing, offering anything for sale, or otherwise." It authorises any petty-sessional court to order a child to be taken out of the custody of any person convicted or committed for trial for ill-treatment or neglect of such child. Another danger to which infants of more mature age are exposed has been met by the Betting and Loans (Infants) Act 1892, which forbids inviting infants to bet or borrow money. An Act passed in 1901 imposes a penalty on any person selling intoxicants to a child below the age of 14. [See also Act 1908.]

[As to the legal position of infants, and the duties and rights of guardians, see Simpson, *The Law of Infants*, 2nd ed., by E. J. Elgood.—Eversley, *The Law of Domestic Relations*.] E. S.

INFLATION

Great Britain, 1797-1819, p. 405; United States, 1862-1879, p. 406.

GREAT BRITAIN. The examples employed for illustration are that of Great Britain in the years 1797-1819, and that of the United States in 1862-79.

Many more might be cited, but these are sufficient to show the main results of an excessive supply of paper money not redeemable in specie. While "money itself is a mere contrivance for facilitating exchanges which does not affect the laws of value," of itself, an excess of the paper money in circulation issued by official fiat, and without any reference to the cost of production of the precious metals represented by it, must inevitably influence prices. The theory on the subject is explained by

Professor Walker (*Money*, ch. xiv.-xvii.) with great clearness, and with copious illustrations.

Specie payments in Great Britain were suspended by order in council, 26th February 1797, owing to a run on the Bank of England. The Bank Restriction Act was passed in that year. The resumption of specie payments on the gold basis, established by the act of 1816, was directed by Sir Robert Peel's Act of 1819, and completed in 1821 and 1822. The Bank of England resumed payments in specie on 20th August 1819.

The effect was well described by Ricardo. "From 1797 to 1819 we had no standard whatever by which to regulate the quantity or value of our money. Its quantity and its value depended entirely on the Bank of England, the directors of which establishment, however desirous they might have been to act with fairness and justice to the public, avowed that they were guided in their issues by principles which, it is no longer disputed, exposed the country to the greatest embarrassment. Accordingly, we find that the currency varied in value considerably during the period of twenty-two years when there was no other rule for regulating its quantity and value but the will of the Bank" (Ricardo's Works, 2nd ed., 1852; London, *On Protection to Agriculture*, § 5, p. 467).

The effect of the restriction of cash payments, and the divergence produced between the value of gold and of the paper currency, is broadly shown by the following Table, derived from Mushet.¹

Market Price of Gold, Value of Currency and Depreciation of Value of Currency in England, 1800-1821.

Year.	Average market price of gold per. oz. from February 1800-1821.	Average percent of the value of the currency at the market price of gold.	Average percentage depreciation of value of the currency.
	£ s. d.	£ s. d.	Par.
1800	3 17 10½	Par.	Par.
1801	4 5 0	91 12 4	8.4
1802	4 4 0	92 14 2	7.3
1803 ¹	4 0 0	97 6 10	2.6
1804	4 0 0	97 6 10	2.6
1805	4 0 0	97 6 10	2.6
1806	4 0 0	97 6 10	2.6
1807	4 0 0	97 6 10	2.6
1808	4 0 0	97 6 10	2.6
1809	4 0 0	97 6 10	2.6
1810	4 10 0	86 10 6	13.5
1811	4 4 6	92 3 2	7.8
1812	4 15 6	79 5 3	20.7
1813	5 1 0	77 2 0	22.9
1814	5 4 0	74 17 6	25.1
1815	4 13 6	83 5 9	16.7
1816	4 13 6	83 5 9	16.7
1817	4 0 0	97 6 10	2.6
1818	4 0 0	97 6 10	2.6
1819	4 1 6	95 11 0	4.5
1820	3 19 11	97 8 0	2.6
1821	3 17 10½	Par.	Par.

¹ By the evidence of Mr. Abraham Goldsmid before

In considering this table the further question remains: Does the premium on gold, in a country having inconvertible paper, fairly measure the full depreciation in respect to purchasing commodities? Professor Walker considers (*Money*, p. 388) that the power of the paper was "much further diminished than its power to purchase gold."

The fluctuations in prices for the period (1797-1819) as chronicled by Tooke, *History of Prices*, vol. i. pp. 210-373, vol. ii. pp. 1-6, and 387-420, are illustrated by the following figures.¹

Year.	Prices per quarter, Winchester measure. Mean price for the year.	Butter (Waterford), per cwt.	Tea (Congo), per lb.	Timber (Memel Fir), per load.
	s. d.	s. s.	s. d.	£ s.
1797	62 0	85 88	2 10 4 5	2 15
1798	54 0	60 68	3 0 3 9	2 10
1799	75 8	78 82	2 5 2 7	3 8
1800	127 0	85 90	2 10 3 7	5 10
1801	128 6	115 117	3 4 3 6	5 15
1802	67 3	65 70	3 0 3 9	3 12
1803	60 0	85 94	3 8 3 5	6 5
1804	69 6	75 80	2 8 3 3	3 15
1805	88 0	68 70	3 1 3 6	3 15
1806	88 0	96 100	2 11 3 8	3 10
1807	78 0	108 110	2 10 3 9	4 0
1808	85 3	100 105	3 2 3 8	6 10
1809	106 0	82 84	3 0 3 7	14 0
1810	112 0	90 95	3 1 3 10	8 10
1811	108 0	115 118	2 11 3 6	10 0
1812	118 0	110 118	3 2 3 8	9 10
1813	120 0	84 90	2 11 3 7	5 10
1814	85 0	138 140	3 5 3 10	7 5
1815	76 0	111 116	3 2 3 7	5 0
1816	82 0	62 68	2 6 3 6	3 5
1817	116 0	93 94	2 9 3 5	2 10
1818	98 0	180 184	2 11 3 7	3 5
1819	78 0	74 78	2 10 3 6	3 10

The general effect is perhaps more clearly shown by Jevons's table of prices in his chapter on the Depreciation of Gold (*Investigations in Currency and Finance*, p. 155).

Year.	Average ratio of prices to the prices of the year 1849 (1849=100).
1789	133
1799	202
1809	245
1819	175
1829	124
1839	144
1849	100

Jevons (*Investigations in Currency and Finance*, ch. iii. heading p. 119) warns us (pp. 180-131) against attributing every rise in

the Bullion Committee 1810, the market price of gold was stated to be £4 per ounce from 1803 to 1809. *Third Report of Royal Commission on Depression of Trade and Industry*, Appendix B. Memorandum of Standard of value. R. H. Inglis Palgrave, p. 314.

¹ Tooke's *History of Prices*, vol. ii. pp. 389, 408, 416, and 417. London, 1838.

prices to the influence of the monetary circulation; but while he regards that Tooke was "partly and only partly right" in holding this view, he considers that "we must assign some part of the elevation of prices" to the manner in which the precious metals were driven out of circulation by the use of paper. It is difficult to estimate with absolute accuracy the effect of over-issues of irredeemable paper on prices. The price of some articles of consumption appears to have been more largely influenced by this cause than that of others, during the period between 1797 and 1819. Again, the effect of alterations in the amount of the currency on prices is more marked at some periods than at others, according as banking facilities are largely used or otherwise. But the table which Jevons himself has compiled leaves no doubt that the inflation resulting from the over-issues of paper currency during the period of bank restriction in Great Britain must have been very great, and that it must have largely exceeded the difference between the value of gold and that of the currency indicated in Mushet's tables quoted above.

UNITED STATES (1862-1879). The period of inconvertible paper money in the United States from 1862 to 1879 is often referred to as the inflationist period. Strictly speaking, "inflation" took place in the United States at other times, markedly in 1815-18 and in 1834-39,—both these being connected with bad banking legislation,—and again in 1854-57, when there was a very simple case of inflation and crisis, not complicated in essentials by currency derangement. But the period 1862-1879, as the one in which the features of "currency inflation" were most marked, will be the one dealt with here.

The issues of paper money began under great financial stress in the course of the civil war, in February 1862, when a first batch of 150 millions of dollars (30 millions sterling) was put out; two more of the same amount followed in July 1862 and March 1863, making a total issue of 450 millions (90 millions sterling) of United States notes or "greenbacks." In addition there were put forth in 1863 and 1864 considerable amounts, the maximum being about 200 millions (40 millions sterling) of interest-bearing legal tender notes, which inflated the currency still further. The result was a rapid disappearance of specie in 1862, and a sharp rise in prices in 1862-65. With the close of the civil war in 1865, the administration—and especially Mr. McCulloch, the secretary of the treasury,—set to work at once to contract the paper issues, and succeeded without much difficulty in getting rid of the interest-bearing notes referred to. A beginning was also made in contracting the United States

notes proper. But in April 1866 congress passed a resolution restricting the pace at which the notes should be paid off; for six months no more than 10 millions of dollars (2 millions sterling) of notes should be withdrawn, and thereafter no more than 4 millions (£800,000) a month. This resolution marks the beginning of the struggle between the inflationists and the advocates of resumption; for the paper issues had been made solely under financial stress in the civil war, and had in no quarter been originally regarded as advisable or likely to endure. The inevitable hardships of contraction and falling prices caused the inflationist movement. The inflationists urged the permanent retention or increase of the inconvertible paper money, the most extreme wing demanding the issue of enough paper to pay off the whole funded debt—over 2000 million dollars (400 millions sterling); the most moderate asking only that the volume of paper be left unchanged, so that the country might “grow up” to it. From 1866 to 1879 the contest was carried on with varying fortune in congress and before the public. In 1868 the inflationists gained a point by the passage of an act forbidding further contraction and leaving the volume of the United States notes at the point where it then stood—356 millions (71 millions sterling). In the height of the panic of 1873 the then secretary of the treasury, Mr. Richardson, put forth some notes previously retired, under questionable legal authority. This became the occasion for a bill, passed by both houses of congress in 1874, providing for an increase of the paper issues to 400 millions (80 millions sterling). The bill marked the height of the inflationist movement; it was vetoed by President Grant, who thus dealt the movement a heavy blow. A compromise bill was then passed, in 1874, fixing the volume of United States notes at 382 millions (76½ millions sterling). Next year (1875) the end of the struggle was brought in sight by the passage of the Resumption Act, which provided for resumption of specie payment in 1879. A gradual decline in the volume of paper was to take place *pari passu* with an expected enlargement of the volume of national bank notes. But this decline was again stopped by an act passed in 1878, which virtually fixed the amount of United States notes at the point then reached—\$346,681,016 (69½ millions sterling). At that they have remained to the present time (1895). Resumption was successfully accomplished at the date fixed (January 1, 1879); and therewith the movement for paper money inflation came to an end. The demand for an increase in the currency after 1879 took another direction in the agitation for the free coinage of silver or the issue of currency based on silver purchases.

[There is no good history of the monetary policy

of the United States since 1860. Some accounts of it are in Bolles, *Financial History of the United States*, Philadelphia, 1886, vol. iii.; J. K. Upton, *Money in Politics*, Boston, 1885. The texts of the various legislative measures are accurately collected in Dunbar, *Laws of the United States on Currency, Finance, and Banking*, Boston, 1891.]

R. W. T.

INGOT. Metal cast in a mould of a size and shape convenient for handling. The word, which is derived from the wedge- or tongue-shaped ingots used by the Romans (*lingo*, to lick with a tongue, Fr., *lingot*), is seldom used in connection with other than the precious metals, though such a cast block of any metal may properly be called an ingot. The shape of the ingots of the precious metals now in use in this country, though varying to some extent, generally approximates to that of an ordinary brick made with slightly sloping sides. In the London bullion market these pieces of metal pass by the name of “bars.”

In China transactions in bullion are carried on by means of shoe-shaped ingots, known as “Sycee” silver; while in Japan ingots of copper are cast, under water, into canvas receptacles, the shape of the resultant mass being that of a shallow dish or saucer.

Gold ingots sent by the Bank of England to the Mint for coinage are of an average weight of 400 ounces troy. They are of two kinds—“coarse” and “fine.” The latter are not, however, composed of metal which is absolutely pure, but have a mean millesimal fineness of 999, while the coarse bars contain on an average 897 parts of fine gold in 1000. Prior to 1889 the mean weight of such ingots was 200 ounces troy, but in consequence of changes in the practice of the bullion market, their weight was then doubled.

The silver ingots purchased by the Royal Mint for coinage are of an average weight of 1100 ounces troy, and an average millesimal fineness of 995·8.

F. E. A.

INHABITED HOUSE DUTY, a tax on inhabited houses calculated by reference to their annual value and payable by the occupier, was first imposed in Great Britain in 1778, the idea being derived from the *Wealth of Nations* (bk. v. ch. ii. part ii. art. i.). Originally the rates were 6d. in the £ for houses worth £5 and below £50 per annum, and 1s. in the £ for those worth £50 or more. The tax was continued at various rates, the highest being 2s. 10d., till its repeal in 1834. This tax, rather than the more objectionable window tax, was selected for repeal on the ground that the great houses, such as Chatsworth, etc., being charged much more highly, relatively, to the window tax than to the house tax owing to the difficulty of ascertaining their annual value to let, the repeal of the window tax would benefit more particularly the richer

classes. The annual produce of the tax at the date of the repeal was about £1,200,000.

This selection was ultimately allowed to be a mistake; in 1851 the policy of 1834 was reversed, the window tax repealed, and the inhabited house duty re-imposed with certain alterations. The rates were 6d. for shops, public-houses, and farm-houses, and 9d. for dwelling-houses. In 1890 graduation was reintroduced, to the extent of charging the duty at lower rates as respects houses of small annual value. The present rates are:—

On shops, public-houses, hotels, inns, coffee-houses, farm-houses, lodging-houses, of the annual value (without any allowance for repairs) of
 £20 and not exceeding £40—2d. in the £
 exceeding £40 " 6d.—4d. "
 exceeding £60 " 6d. "

On private houses, clubs, and business premises other than shops (unless exempt) of a similar annual value, 3d. 6d. or 9d. in the £ as the case may be.

The principal exemptions are:—houses below £20 of annual value; houses belonging to His Majesty or any of the royal family; public offices; hospitals; charity schools; poorhouses; houses or tenements occupied solely for business or professional purposes (a caretaker allowed); artisans' dwellings. The tax is under the administration of the commissioners of inland revenue, and the chief enactments concerning it are:—14 & 15 Vict. c. 36; 43 Geo. III. c. 161; 48 Geo. III. c. 55 (Sch. B); 41 & 42 Vict. c. 15, § 13; 53 & 54 Vict. c. 8, §§ 25 and 26; 54 & 55 Vict. c. 25, § 4; 3 Edw. VII. c. 46, § 11. It does not extend to Ireland.

In 1904-5 the net receipt from the tax was £2,014,206. The following table shows the number and annual value of the houses charged in 1903-4:—

	Number.	Annual Value.
Private Dwelling-houses . . .	1,850,399	£62,256,746
Residential Shops . . .	312,684	16,018,797
Hotels, Public-houses, and Coffee-houses . . .	96,477	9,468,249
Farm-houses . . .	33,073	828,279
Lodging-houses . . .	23,459	1,541,026

In 1901 the royal commission on local taxation recommended (Final Report, p. 21) the transfer of this imperial tax to the local authorities in relief of rates [ed. 638].

[Dowell's *History of Taxation and Taxes in England*, vol. iii. p. 178.—Piper's *House Tax Laws*, 1903.—48th Report of Commissioners of Inland Revenue, pp. 166-189.—See for various motions in Parliament, Hansard, (123), 903, (197), 1802, (200), 1874, (280), 90, (285), 224, (335), 436. See ASSESSMENT; TAXATION.] F. A.

INHERITANCE, ESTATE OF. An estate in land extending beyond the duration of one or more lives is called an "estate of inheritance." Such an estate must be either an estate "in fee simple, which in popular language is described as absolute ownership," or an estate tail (see **ENTAIL, LAW OF**). E. S.

INHIBITION (Scots law). An order against

contracting any debt which may become a burden or charge on heritable property (realty) or which may give rise to process issuing against the realty of the party inhibited, to the prejudice of the complainer. It takes effect as of course by registration, in the General Register of Inhibitions in Edinburgh, of a summons containing a "warrant for inhibition," duly issued and served. The inhibition is personal to the debtor, and applies only to realty vested or in expectancy at its date, and to voluntary obligations undertaken after its date. The effect of an inhibition, standing alone, is merely to deter purchasers; but it may be followed by an "adjudication," by which the creditor may be adjudged a preference over other creditors whose claims originated after the inhibition. There is also an inhibition by a husband against his wife—obtained by a bill to the Court, issued as of course without reason assigned, and registered in the General Register of Inhibitions,—by which it is notified to the public that the wife's agency has been cancelled, except in regard to necessities for which it may be proved that the husband has not otherwise made provision. A. D.

INLAND NAVIGATION. See CANALS.

INOFFICIOSUM TESTAMENTUM is the term used in Roman law to signify a will which may be set aside because it violates the duty of natural affection existing between certain near relations, as when a parent, without proper cause, leaves less than the legal share (*portio legitima*) to a child, or a child leaves less to a parent (see **LEGITIM**). E. A. W.

INSCRIBED STOCK. A **SECURITY** (*q.v.*) is called "inscribed" to distinguish it from a security which passes from hand to hand by delivery. A register is kept, where in the case of English or government loans or in the case of shares in an English company, transfer of ownership can be made. Registration or inscription is found suitable to English habits and ideas. On the continent and in America there is a prejudice against anything which publishes the ownership of securities, and bonds or shares to bearer are there preferred. As to the risk of forged transfers of inscribed securities see **FORGED TRANSFER**. A. E.

INSCRIPTION MARITIME (FRANCE)—the system of recruitment for the navy organised by a law of the year iv. of the first republic (1796). All men who have made two over-sea voyages on a state or merchant vessel, or have served eighteen months at sea, or been two years engaged in fishing, are inscribed on the maritime register, and may be called for service in the fleet from the age of eighteen to fifty. The period of obligatory service is from twenty to twenty-seven years of age, after which the *inscrits* pass into the reserve and are only liable to service in case of war, and in the order of the classes to which they belong, those most

recently liberated being taken first. From the ages of eighteen to twenty the young men may, on demand, anticipate the time for commencing the period of obligatory service. Since 1874 engineers and stokers on steamers are comprised in the maritime inscription. The *inscrits* enjoy many privileges; they have a monopoly of the fishing in French waters, and may alone obtain concessions of parts of the shore or banks of tidal rivers and salt-water pools, for taking or breeding fish; they are not liable to any other public service; and have a right to a pension at the age of fifty, after twenty-five years' service in any kind of navigation, which pension is continued, but reduced, to their widows and orphans. A contribution of 3 per cent of their wages, whether earned on state or merchant ships, is, however, made to the pension fund, called the *Caisse des Invalides de la Marine*. During the period of obligatory service the men may obtain furloughs for service on merchant or shipping vessels. The number of men belonging to the maritime inscription serving in the fleet is about 24,000, forming about two-thirds of the crews, the remainder are volunteers or men drawn in the ordinary military conscriptions to serve as marines, not enjoying the privileges of the *inscrits*, and having no right to a pension although liable to military service to the age of forty-six (cp. IMPRESSMENT).

["Rapport adressé au Ministre de la Marine au nom de la Commission chargée de l'étude des questions se rattachant au régime de l'inscription maritime," *Journal Officiel*, 12 Decembre 1890.]

T. L.

INSOLVENCY. See BANKRUPTCY LAW AND ADMINISTRATION.

INSPIRATIONISTS. See AMANA SOCIETY.

INSTALMENT. When the payment of any sum of money, instead of being effected altogether on one date, is to be divided into several parts to be effected on certain successive dates it is called a payment by instalments.

A. E.

INSTITORIA ACTIO is an action of Roman law maintainable against the owner of a business on account of a contract entered into with the superintendent or manager (*institor*). The manager himself, as party to the contract, was liable to an action on the contract he had made, as well as his master—Roman law, owing principally to the frequent employment of slaves in commercial transactions, not fully recognising the principle of contractual agency, which is essential to modern commerce.

E. A. W.

INSTRUMENT, NEGOTIABLE. A negotiable instrument differs from an ordinary contract or instrument, securing the payment of money, in three respects:

(1) It is assignable by virtue of the usage of trade, whereas a contract or "thing in action" is not ordinarily assignable at common law. A negotiable instrument purporting to be payable

to bearer may be assigned by mere delivery; or if purporting to be payable to order, then by indorsement completed by delivery.

(2) The consideration for its issue or transfer is presumed until the contrary is proved.

(3) If it gets into the hands of a holder for value without notice, he holds it free from any defects of title which would have vitiated it in the hands of any previous holder.

The term "negotiable instrument" is usually confined to the original and typical negotiable instruments, namely, bills of exchange, promissory notes, and cheques; and the term "negotiable security" is applied to the negotiable bonds and scrip which in recent years have become so common in the money market. For the most part these instruments would be governed by the same considerations as promissory notes payable on demand. For revenue purposes, however, they are subject to special stamp regulations (see also COMMERCIAL INSTRUMENT; BILLS OF EXCHANGE ACT, App.).

[Chalmers, *Bills of Exchange*, 4th edition, pp. 312-327.]

M. D. C.

INSURANCE

History, p. 409; Life, Theory of, p. 410; Law and Practice of Life, p. 416; Marine, p. 418; Mutual, p. 419; State (Germany), p. 419.

INSURANCE, HISTORY. There appear to have been two forms of contract akin to insurance known to the ancients. The first is mentioned by A. Böckh (*Public Economy of Athens*). He states that "the idea of an institution for the insurance of slaves first occurred to Antigones of Rhodes" (in the time of Alexander the Great, 356-323 B.C.), "who undertook, for a yearly contribution of eight drachmas for each slave that was in the army, to make good his price, as estimated by the owner at the time of elopement." Bottomry (see BOTTOMRY, LOAN ON) was also known to the Greeks. Among the Romans, the earliest mentioned transaction of this nature is the contract, noticed by Livy, made after the battle of Cannæ, for the supply of stores to the Roman government, the contractors stipulating that the state should bear all losses which might arise from the enemies' attacks, or from storms. But with the barbarian invasion, and consequent cessation of commerce, all such practices fell into disuse. The origin of modern insurance is obscure. Instances of some form of insurance are found amongst various nations in early mediæval times, but there appears to be no direct connection between them and the methods now adopted. The first form of mediæval insurance was undoubtedly marine, the system being afterwards extended to other objects.

Many countries or towns have claimed to be the birthplace of marine insurance, particularly Barcelona, Wisby, and Bruges; but it appears

really to have originated among the commercial cities of Italy, the earliest mention referring to Florence (14th century). It may even have been practised in the 13th century: an unedited Pisan document (the *Brève Portus Calleritani*, 1318) is supposed to refer to insurance at Cagliari. *Chambers of Insurance* were established at an early date on the continent, notably at Barcelona and Bruges. The period of its introduction into England is equally obscure; in the earliest statute on the subject (1601), it is stated that it "hathe been tyne out of mynde an usage amongst merchants." Bacon quotes it as a usual practice in 1558.

The insurance on a ship and its cargo representing usually too large a sum for a single individual, it is divided amongst several underwriters, each of whom guarantees such a fraction of the risk as he thinks proper. By far the greater portion of marine insurance in this country is done at Lloyd's, now a corporation, but formerly simply a meeting-place for underwriters. This institution originated in the coffee-houses established in London towards the end of the 17th century, one of which, owned by Edward Lloyd (first mentioned in 1688), became the resort of marine insurers, and ultimately all their underwriting was done there; as the business grew larger, it was removed to the Royal Exchange in 1774. Two companies, the "London" and the "Royal Exchange" Assurance Corporations, obtained in 1720 a charter with a monopoly, as companies, of marine insurance business. No other company was formed until 1824, when Rothschild obtained the repeal of this exclusive charter, and founded the "Alliance" Insurance Company. The companies did not interfere much with individual underwriting. The amount of marine property insured in 1810, according to estimates made at the time of the Royal Commission, was about £160,000,000, of which some £130,000,000 was underwritten at Lloyd's.

The first fire insurance office in London was set up after the Great Fire, in 1667, by N. BARBON (*q.v.*), although schemes had been suggested in 1635, 1638, and 1660. But fire insurance almost certainly existed earlier on the continent. Part of the functions of fire insurance companies was to extinguish fires; this was undertaken in their own interests, and all the important companies in London maintained fire brigades until 1866, when they were taken over by the Metropolitan Board of Works. Fire engines were first introduced into London from Holland in 1633. Barbon's method was individual underwriting: the first joint-stock association was founded in 1681 "at the back of the Royal Exchange." The oldest existing office is the "Hand in Hand," which dates from 1696. The growth of fire

insurance business can be best judged from the following table:

Year.	Value of Property insured.
1783	£135,000,000
1800	200,000,000
1840	645,000,000
1860	1,000,000,000
1868	1,430,000,000

These values are the amounts on which duty was paid; as this was abolished in 1869, statistics of fire insurance since 1868 are only officially given of such offices as undertake also life business. Life insurance offices are compelled to make an annual return to the Board of Trade. The Board of Trade returns for 1908 give the income from all sources received by British offices as about £54,000,000, and the claims paid as £23,000,000.

[C. Walford, *Insurance Cyclopaedia*, 1871-80.

—F. Hendriks, "Contributions to the History of Insurance," in *Assurance Magazine*, vol. ii., 1852.

—F. Martin, *History of Lloyd's and of Marine Insurance in Great Britain*, 1876.—W. Gow, *Marine Insurance*, 1895].

R. H. H.

INSURANCE, LIFE, THEORY OF. The object of insurance is to spread the burden of losses, which to the individual would be crushing, over a large body of insured, and so render that burden easy to bear. This object is effected by collecting from each of the insured a sum, called a premium, proportioned to the risk to be insured against; and out of the fund so formed, those of the insured who have experienced loss from the contingencies covered by the insurance, are indemnified.

Materials are not available for ascertaining accurately the extent to which life assurance is practised in the United Kingdom. All active companies are required by the Life Assurance Companies Act 1870 to make periodical returns to the board of trade, but these returns do not distinguish between home and foreign business, and they are not made up by the different companies to a uniform date. The last available figures (board of trade, 1894) show that at their then latest periodical valuations, British companies were liable under their life policies to the amount of £628,070,176; that in their respective last financial years they received in premiums £22,790,349; and that at the dates of the last balance sheets the invested funds, accumulated entirely out of premiums, and exclusive of share capital, amounted to £194,175,429. Assurances on lives insured by British offices, and resident in the colonies and abroad, are included in these aggregates, but on the other hand assurances granted by colonial and foreign companies on lives resident in the United Kingdom are excluded. These sources of error are in opposite directions, and the figures may be taken roughly to represent the

amount of life assurance existing at the present day on the lives of persons resident in the British Isles.

From the magnitude of the totals it is manifest how important to the community is a sound system of life insurance, and the object of the present article is to explain, as briefly and as simply as possible, the scientific principles on which the business is conducted, and which experience has shown to be safe and trustworthy.

In early days life policies were granted only for short terms, generally for a year, or less; the earliest, of which full particulars have been preserved, was made on 15th June 1583, for £383:6:8 on the life of Wm. Gybbons for one year, the premium being at the rate of £8 per cent. No record seems to remain of the age of the life assured, probably that was a detail not thought of at the time. This policy was underwritten by thirteen private individuals, after the manner of marine insurances at Lloyd's in the present day.

About the year 1650, societies for the assurance of lives began to be formed. The principle on which they were worked was, that each surviving member had to pay a fixed contribution in respect of each death; so that the amount receivable by the representatives of a deceased member varied according to the numbers in the society at the time of his death, and the contributions of the members varied according to the number of deaths which occurred in any particular year. No attempt was made to graduate the contributions of members according to their respective ages. In 1705 the "Amicable Society" was formed. Its system at first was to charge each member an annual premium of £6:4s., besides certain annual dues, and to divide among the representatives of the members who might happen to die in any particular year the amount received in premiums in that year to the extent of £5 per contributing member, so that in a year in which there happened to be few deaths, the share in respect of each death would be large; and in the event of many deaths, small. At first no limit of age was imposed, but soon it was found that an influx of an undue proportion of old lives would reduce the death money inconveniently, and in 1707 the regulation was passed that members on admission must be between twelve and forty-five years of age. For a century this rule remained in force, and it was not until 1807 that a table of premiums was adopted graduated strictly according to age.

The weakness of the early assurance societies was that with the growing age of the members the death rate increased and the claims became onerous, so that either the contributions demanded from the members had to be augmented, or the amounts paid on death reduced.

The societies formed on this unsound basis all succumbed to the inevitable strain, except the Amicable, which, taught by experience, altered its constitution; but in 1762 the Equitable Society was formed on the principle which is now recognised to be the only sound one; and it still carries on business as one of the most successful financial institutions of the country.

Life insurance differs from other descriptions of insurance in that the risk to be insured against is constantly increasing with the duration of the contracts. That the rate of human mortality increases with the age was dimly known at a very early period, the Romans at the commencement of the Christian era valuing annuities charged on estates by a table giving values large for young lives, and constantly diminishing with advancing age. There seem, however, to have been no efforts made to estimate the true rates of mortality until 1671, when John de Witt, Grand-Pensionary of Holland, presented a report, not published until long afterwards, on the subject, to the states-general; and it was not until 1693 that the first real mortality table was formed, by E. HALLEY, Astronomer-Royal of England, and published that year in the *Philosophical Transactions*. It was based on observations made on births and funerals in the city of Breslau.

When the Equitable Society was started in 1762, it employed for the calculation of its premiums a mortality table constructed from the London bills of mortality. This showed heavy rates of mortality, beyond those which the subsequent experience of the society proved really to prevail, and in 1781 the Northampton table was adopted which, however, still showed an excessive death-rate.

A mortality table tells us how many persons out of a given number born, or starting from a given age, survive to each subsequent age; and consequently it also shows how many out of the given number at the commencement die in each year of their age. The number with which the table commences is called the *radix* of the table. It is usual to arrange the table in columns, the first column containing the age attained, the second the number who attain that age, and the third the number who die between that age and the next higher age. The age is usually denoted by x , or one of the other letters at the end of the alphabet. The number who attain age x is denoted by the symbol l_x , and the number who die between ages x and $x+1$ by the symbol d_x . The following is an illustration of a mortality table. It is the early portion of the *H^M Healthy Males* table formed by the institute of actuaries from the experience of twenty British life offices. It will be observed that the commencing age is ten years, and the radix is 100,000. The radix is a purely arbitrary quantity, chosen only for the sake of convenience—

Age.	l_x .	d_x .
10	100,000	490
11	99,510	397
12	99,113	329
13	98,784	288
14	98,496	272
15	98,224	282
16	97,942	313
17	97,624	379
18	97,245	466
19	96,779	556
20	96,223	609
21	95,614	643
22	94,971	650
23	94,321	638
24	93,683	622
25	93,061	617

The mortality table affords the means of calculating the probabilities of life and of death. Thus, there being l_x persons alive aged x , of whom l_{x+t} survive to age $(x+t)$, there are, out of l_x chances altogether, l_{x+t} chances of any one of the l_x persons surviving to age $(x+t)$. Therefore the probability of a person aged x surviving to age $x+t$ is $l_{x+t} \div l_x$. This probability is denoted by the symbol ${}_x p_t$, or when $t=1$, simply by p_x . In a similar way, as $l_x - l_{x+t}$ persons, out of l_x living at age x , die before reaching age $(x+t)$, the probability of dying between ages x and $(x+t)$ is $(l_x - l_{x+t}) \div l_x$, which $= 1 - {}_x p_t$.

In financial transactions involving life contingencies, the operation of interest must be taken into account, because the premium has to be paid by the assured at the commencement of the contract, and the sum assured is not paid until the close; consequently the office keeps the premium invested in the interim, and secures interest on it. If by i we denote the interest in a year on £1, or more generally on 1 unit of value, whether that unit be a pound, a franc, or a dollar, etc., then 1 invested at the beginning of a year will amount to $(1+i)$ at the close. This is called the *amount* of 1 in a year. Similarly if any other sum S be invested for a year, it will produce Si in interest, and at the end of the year will amount to $S(1+i)$. The original unit, 1, having amounted to $(1+i)$ in a year, if that amount be again invested, it will amount at the end of the second year to $(1+i) \times (1+i)$ or $(1+i)^2$, which is the amount of 1 at compound interest in two years. Proceeding thus, we find that the amount of 1 in three years is $(1+i)^3$, and generally the amount of 1 in t years is $(1+i)^t$.

Seeing that $(1+i)^t$ is the amount of 1 in t years, it follows that 1 is the present value of $(1+i)^t$, to be received at the end of t years; and, by simple proportion, the present value of 1 to be received at the end of t years is $1 \div (1+i)^t$ or $(1+i)^{-t}$. This present value is usually denoted by the symbol v^t . Thus, the present value of 1 due at the end of one year is v , where $v = 1 \div (1+i)$ and $(1+i) = 1 \div v$.

Suppose it were desired to provide an endowment of £100 for a child now aged fourteen on his attaining age twenty-one, what premium should be paid down, assuming interest at 3 per cent? It will be well to solve the problem first in general symbols. If there be l_x persons aged x , we shall

have l_{x+t} surviving at age $(x+t)$. Therefore, if an endowment of 1 is to be secured to each of them at age $(x+t)$, the sum of l_{x+t} must be provided at the end of t years. For that purpose, $v^t l_{x+t}$ paid down now and invested will suffice; and as there are l_x persons who must each pay his proportion, the sum to be paid by each is $v^t \frac{l_{x+t}}{l_x}$

or $v^t p_x$. This is called the present value of, or the single premium for, the endowment. Thus, the present value of the endowment is the sum to be received, discounted down to the present time, and multiplied by the probability of receiving it. Taking up now the numerical example: by the specimen mortality table given above, there are 98,496 children aged fourteen, of whom 95,614 will attain the age of twenty-one; hence, if each of the survivors is to receive £100, the sum of £9,561,400 will have to be provided at the end of seven years. At 3 per cent interest the present value of 1 to be received in seven years is '8130915, and the present value of £9,561,400 is £7,774,293. There being 98,496 children, the sum to be paid down now in respect of each is £78'930, or £78:18:7, which is the present value of, or the single premium for, the endowment of £100. Or, looking at the matter in another way: the probability of a child aged fourteen attaining the age of twenty-one is $95,614 \div 98,496$ or '97073; and the value of 1 to be received certainly at the end of seven years is '8130915. Therefore the value of 1 to be received conditionally on a child aged fourteen surviving until aged twenty-one is '97073 \times '8130915 or '78930, and the value of £100 so to be received is £78'930 as before.

It should be noted that in speaking of the present value of an endowment we assume a sufficient number of endowments to allow of the law of average asserting itself. If there were only one endowment, and the child happened to survive, the sum paid at the commencement would not amount to the sum to be provided. In the case of the above example it would amount to only £97'073, and the £100 could not be paid in full. On the other hand, should the child happen to die, there would, at the end of the term, be the sum of £97'073 in hand without a claimant. It is only when there are a sufficient number of lives to obviate accidental fluctuations that the figures work out properly. The same observation applies to every kind of contingent benefit.

An annuity is an annual payment to be made either for a fixed term of years, or during the existence of a given life, or of a given combination of lives. In the former case the annuity is called an annuity-certain, and, in the latter, a life annuity, or simply an annuity. According to the elementary principles already discussed, the present value of the first payment of an annuity-certain of 1 per annum is v ; that of the second payment v^2 , and so on. If the annuity be for n years its value is denoted by a_n , the angle round the suffix showing that no contingency is involved. We therefore have the value of an annuity-certain

$$a_n = v + v^2 + v^3 + \dots \text{etc.} \dots + v^n.$$

The series is a geometrical progression, and by the usual formula for summing such a series, the

sum is $v \frac{1-v^n}{1-v}$, from which, remembering that $v = \frac{1}{1+i}$, we have $\alpha_n > \frac{1-v^n}{i}$.

It will readily be seen that a life annuity consists of a series of endowments, and by the formula we have already obtained for the value of an endowment, we have, writing α_x for the value of the life annuity where the age of the nominee is x ,

$$\alpha_x = \frac{1}{l_x} (v^1 l_{x+1} + v^2 l_{x+2} + v^3 l_{x+3} + \text{etc.})$$

There is no way of summing this series except by actual addition. Here each number in the column of l_x is multiplied by a power of v , the index of the power having no reference to the age of the life, but only to the length of time which must elapse before a particular payment of the annuity is to take place. If, therefore, we have calculated by the formula the value of an annuity on a life aged x , all the multiplications and additions must be done over again if we are called upon to calculate the value of an annuity on a life of any other age, and the work becomes tedious and lengthy. In early days the labour was abbreviated by employing a simple relation which exists between the value of an annuity on a given life, and that of an annuity on a life one year older. At the end of the first year the life, if he survive, will be entitled to a payment of 1, and he will also be in possession of an annuity for the remainder of his life, the value of which will then be α_{x+1} . He will, therefore, at the end of a year be in possession of cash and of an annuity together worth $1 + \alpha_{x+1}$. The value of this at the beginning of the year is $v(1 + \alpha_{x+1})$, and the chance of receiving it is p_x . Therefore the actual present value is $v p_x (1 + \alpha_{x+1})$ which is α_x . Therefore, commencing at the oldest age in the mortality table, at which the value of the annuity is zero, and working backwards year by year, a complete table of annuity values can be formed, and it is about as easy to calculate the complete table as to calculate the value of an annuity at the youngest age.

If, however, we look again at the series representing the value of the life annuity, we shall easily introduce a modification which will enable us, by a simple division, to calculate the value of an annuity on a life of any age we please. The value of the annuity is represented by a fraction, and if we multiply both numerator and denominator by the same quantity, we do not alter its value. Let us then multiply by v^x , and we have

$$\alpha_x = \frac{1}{v^x l_x} (v^{x+1} l_{x+1} + v^{x+2} l_{x+2} + v^{x+3} l_{x+3} + \text{etc.})$$

where each value of l is multiplied by a power of v , the index of which is the same as the suffix of that particular l . If now we write D_x for $v^x l_x$, we have

$$\alpha_x = \frac{D_{x+1} + D_{x+2} + D_{x+3} + \text{etc.}}{D_x}$$

Let us now write the successive values of D in a column, and sum that column from the bottom upwards, and place in an adjoining column against each age the sum of the column D from

the age one year older to the end of the table, and let us denote that sum by the symbol N , that is

$$N_x = D_{x+1} + D_{x+2} + D_{x+3} + \text{etc.} +$$

We then have two columns, the relation of which to each other is such that

$$\alpha_x = \frac{N_x}{D_x}$$

Such columns are called commutation columns, and the principles on which they are constructed have been extended and applied to many other kinds of benefits besides annuities. They will be found in all collections of actuarial tables.

One great advantage of commutation columns is, that by means of them the values of temporary and of deferred benefits can be calculated with great facility. Thus, if the life annuity is to run for only t years, all the payments after t years must be left out of account, and it is easily seen that the value of the temporary annuity is $\frac{N_x - N_{x+t}}{D_x}$. If, on the other hand, nothing is to

be paid for the first t years, then the value of the deferred annuity is $\frac{N_{x+t}}{D_x}$.

The endowment and the annuity already considered are benefits receivable if a nominee survive, but the same principles hold if the benefit be receivable at death. What is the present value of, or single premium for, an assurance payable at the end of the year of the death of a person aged x ? Assuming l_x persons of that age, each to be assured, d_x will die in the first year, and the sum d_x will have to be provided at the end of the year, and the present value of that sum is $v d_x$. Similarly, the sum d_{x+1} will have to be provided at the end of the second year—its present value is $v^2 d_{x+1}$ —and so on for future years. The value of all the l_x assurances is therefore

$$v d_x + v^2 d_{x+1} + v^3 d_{x+2} + \text{etc.},$$

and the value of each of them is therefore the sum of that series divided by l_x . By multiplying each of the terms of the series, and also the denominator, by v^x , the value of the fraction is not changed, while a column is thereby formed for assurances similar to the D column already described for annuities. The function $v^{x+1} d_x$ has the symbol C_x assigned to it, and

$$M_x = C_x + C_{x+1} + C_{x+2} + \text{etc.},$$

so that if we write A_x for the single premium for the assurance, we have

$$A_x = \frac{M_x}{D_x}$$

We have thus obtained by independent processes direct from the mortality table, the respective values of the annuity and the assurance; but these two functions are closely related, and, having the value of one, we can at once assign the value of the other. The annuity consists of a payment of 1 to be made at the end of each year which the nominee completes; and the assurance consists of a payment of 1 to be made at the end of that year on which the nominee enters but does not complete, namely the year in which he dies. Therefore the value of the assurance is the difference between the values of two annuities, the one payable at the end of each year on which the

nominee enters, and the other payable at the end of each year which he completes. Now $v(1+a_x)$ is evidently the value of the first of the annuities, and a_x is the value of the second; and we have

$$A_x = v(1+a_x) - a_x$$

This equation is quite independent of the rate of mortality; it depends solely on the rate of interest, and was skilfully used by the late William Orchard in preparing his celebrated *Conversion Tables*. By means of these tables the value of the assurance and also the annual premium for the assurance, can at once, and without calculation, be found from the value of the annuity.

We have found the single premium for the assurance, but it is not often in practice that a single premium is convenient. To find the annual premium we may look on A_x as the purchase money of an annuity, the first payment of which is to be made at once, because it is customary with assurance offices to make the annual premiums payable at the commencement, and not at the end of each year. Since $1+a_x$ is the purchase money of such an annuity of 1 per annum, unity will

purchase $\frac{1}{1+a_x}$ per annum, and A_x will purchase

$\frac{A_x}{1+a_x}$ per annum, which is therefore the annual

premium corresponding to the single premium A_x . Using the symbol P_x for the annual premium, we therefore have

$$P_x = \frac{A_x}{1+a_x}.$$

In former days the single and annual premiums used in practice were those given by the formulas above discussed, but the rate of mortality shown by the mortality tables then in use was much in excess of that actually prevailing, and the rate of interest employed in the calculations was below that which could be secured on safe investments. It therefore follows that the formulas gave rates in excess of those theoretically necessary, and left a margin for expenses and contingencies. The Equitable Society found that margin so great that large surpluses resulted, and these were distributed as bonuses among the policy-holders. In later years, however, when the true rates of mortality were better known, it became the custom, with a majority of offices, to calculate the single and annual premiums by mortality tables closely representing the real facts, and to employ practical rates of interest. Under these circumstances it was therefore necessary to add to the mathematical premium deduced from the mortality table a margin called "loading," to cover the expenses of the business, to provide against contingencies, and to create a fund out of which the policy-holders might obtain bonuses, because the practice of the Equitable in dividing the surplus amongst its members had become very popular, and other societies, in order to compete successfully, had to follow the same course.

We have discussed so far only assurances for the whole of life, and it is not our purpose to go into further detail. By similar processes, more or less complicated according to the nature of the contingencies to be covered, premiums may be

calculated for all kinds of risks, but those wishing to investigate the question further should consult the text-books mentioned lower down.

We have already remarked that life assurance differs from assurance of other descriptions in that the risk to be insured against constantly increases with the duration of the contracts. It will be observed that the formula given above for the annual premium provides for a uniform premium payable throughout life. It follows from this that in the earlier years the assured pays an excess beyond that required for the risk, while in later years the risk is greater than the premiums received. Therefore, if the insurance society is to remain solvent, the surplus premiums of earlier years must be religiously husbanded and accumulated at interest, so as to provide for the deficiency when the lives assured become advanced in age. In other forms of insurance all that is necessary in the way of reserves is a sufficient proportion of the premium for the unexpired risk of the year, and a reserve fund to cover accidental fluctuations. With life assurance, however, the case is different. The unexpired risks of the year must be provided for, and also a guarantee should exist to provide against accidental fluctuations; but over and above these two reasons for providing a reserve, there is the increasing rate of mortality, which necessitates large accumulations. In fact, the so-called reserves of life assurance companies are, for the most part, not in the nature of reserves as usually understood; that is, they are not surplus funds to guard against contingencies, but merely accumulations of excess of premiums received when the risk is small, and laid by against the time when the risk will become great; and they are just as much required for the purpose of solvency, and apart altogether from fluctuations, as the premiums themselves. This being a very important principle, in fact the fundamental principle underlying life assurance, it may be useful to give a numerical illustration of its operation. In an ordinary mortality table the rate of mortality increases but slowly for many years, and to base our illustration on it would involve very lengthy calculations. It is better, therefore, to take an exaggerated example, the principle remaining the same. Let a society be supposed to exist consisting of fifty-five persons, and let the rate of mortality be such that one of these will die in the first year, two in the second, three in the third, and so on, until ten die in the tenth year, when all the members of the society will have passed away. Let it be arranged that each of these members be assured for £100 by an annual premium payable throughout the duration of the contract. What will the premium be, and what will be the working of the fund? Of course, in practice, interest would be secured on the investment, but for the present purpose it is a needless complication, and we may leave it out of account. By assuming interest the figures would be slightly altered, but the principle guiding them would not be changed.

Were the rate of mortality to remain constant as at the commencement, we should have one person in fifty-five die in each year, and therefore the premiums to insure £100 for a year would be $\frac{100}{55}$, or £1:16:5 nearly. Seeing, however, that

in the second year two out of fifty-four die, and in the third year three out of fifty-two, etc., it is manifest that this initial premium would be too small, and if in each year the premium collected were to be equivalent to the risk incurred, the premium would be an increasing one, in the second year $2\frac{1}{2}$, or £3:14:1 nearly, in the third year $3\frac{1}{2}$, or £5:15:5 nearly, until in the tenth year it reached 100 per cent, and there would be no assurance at all. It will be found, however, that if fifty-five persons pay a premium in the first year, fifty-four in the second, fifty-two in the third, and so on, the total number of premiums to be paid throughout the ten years will be 385; and, there being fifty-five claims of £100 each to be paid, an easy calculation brings us to 14:28:57, being $\frac{1}{4}$ of £100, or £14:5:9 nearly, as the uniform annual premium to be paid by each member who enters on a year, that £100 may be paid to the representative of each on death.

The following table shows the working of the fund. The first column gives the year, the second the number of members who commence the year, that is the number of premiums to be paid for that year; the third the number of deaths in the year, that is the number of claims to be paid; the fourth the amount of premiums to be received at the commencement of each year, the fifth the amount to be paid in claims in that year, and the sixth the accumulated funds at the end of each year.

(1) Year.	(2) Members at commencement of year.	(3) Deaths in year.	(4) Premiums paid for year.	(5) Claims paid in year.	(6) Funds at end of year.
1	55	1	785-71	100	685-71
2	54	2	771-43	200	1257-14
3	52	3	742-86	300	1700-00
4	49	4	700-00	400	2000-00
5	45	5	642-86	500	2142-86
6	40	6	571-43	600	2114-29
7	34	7	485-71	700	1900-00
8	27	8	385-71	800	1485-71
9	19	9	271-43	900	857-14
10	10	10	142-86	1000	000-00

It will be noticed that the uniform premium, sometimes called the "level premium," of £14:5:9 per cent is, at the beginning, much in excess of £1:16:5, the premium for that year's risk, sometimes called the "natural premium," whereas, after a short time, the natural premium becomes much heavier than the level premium. Our hypothetical fund increases until the fifth year, when it attains its maximum, and then it is gradually drawn on to meet the excess of claims, until at the end of ten years, when all the members have died, the funds have entirely disappeared. This illustrates the purpose for which life assurance funds are created. If a life office were to close its doors to new business its funds would increase for many years, remaining for a short time at the maximum figure, and then would begin to be drawn upon, the drafts rapidly increasing in amount, until at last, with the death of the last life assured, the funds would be entirely exhausted.

It is assumed in the calculations of the level

premium that the contract will remain in force for the whole duration of the life of the assured, that the assured will pay the premium regularly year by year, that the office will reserve and invest the difference between the premiums received and the amount actually necessitated by the risk incurred, and that on the death of the life assured the claim will be met. It often happens, however, that after a time the policy is no longer required, and in justice to the policy-holder a portion, at any rate, of the excess of premiums he has contributed should be returned to him. This is the surrender-value of the policy. In early days surrender-values were not granted, and the insurance offices reaped large profits from this source. For many years now, however, it has been the custom to grant liberal surrender-values, and this source of profit is a thing of the past. It is not usual to pay back the whole of the reserve value. The company has no option in respect of the continuance of the contract. If the policy-holder tenders the premium the company must receive it, and it is only on the motion of the policy-holder that the contract can be terminated. Manifestly he will be guided by his own interests in deciding whether to continue or surrender, and it is only fair to the other members, who elect to adhere to the bargain, that a portion of the reserve value should be kept in hand. It is, however, a matter of opinion what is a fair and proper allowance to make for cancelled policies, and the practice of the offices differs within moderate limits in this respect. Nevertheless, at the present day, all companies make a substantial allowance.

We have seen above that, for the purpose of solvency, a life company must retain large funds in hand. Were merely the mathematical or net premiums charged, and were it certain that the rate of mortality shown in the mortality table would accurately correspond with the actual event, the accumulations of the company would be exactly the amount of reserve required; but companies charge loaded premiums, and therefore the accumulations in a well-managed office are greater than the necessities of the case demand. It is, therefore, the custom to make periodical valuations. These are of too complicated a character to be discussed here, but briefly we may say that the object is to ascertain how much of the invested funds consists of the excess of premiums which must be set aside to provide for future risks, and how much is real surplus. When the surplus is ascertained, it may be divided according to the constitution of the company, and hence arise the bonuses to policy-holders, which are almost a universal feature of life assurance as carried on in the United Kingdom. The valuation shows what surplus cash is in hand. If the whole of that be allotted as a bonus to increase the sum assured, it is manifest that when the lives are young the same amount of cash will give a larger reversionary addition than when the lives become more advanced in age. Some offices adopt this course, and give a reversionary bonus which decreases as the policy grows older. This, however, is not a system which is very popular with the public, who do not understand the reasons for a decreasing bonus. With many offices, there-

fore, it is the practice, in the early days of the policy, not to divide the whole of the surplus that policy has created, but to retain part of it in hand, so that, later on, when the life has become older, there may be no necessity for reducing the periodical reversionary additions. Hence has arisen the custom of making the valuation of the office at a much lower rate of interest than that which will probably be realised, and here again we have an illustration of the effects of the operation of the law of increasing mortality. Did the mortality not increase with the age, the reversionary bonus would not cost more with the lapse of time, and there would be no need for making these specially great reserves. It thus appears that, in order fully to understand the finance of life assurance, an intimate knowledge of the complicated principles on which it is based is requisite. Space, however, forbids us from entering further upon this most interesting and important question here, but these brief explanations will suffice to show that knowledge and discretion are required to judge wisely of our insurance companies. They differ in essential principles from all other financial institutions, and must be measured by a completely different standard.

[Here only a few of the more important English works on life assurance can be mentioned. For further information consult catalogues of libraries of Institute of Actuaries in London, and of Faculty of Actuaries in Edinburgh.]

J. GRAUNT (*q.v.*) was one of the first English writers; A. DEMOIVRE (*q.v.*) expounded in his *Treatise of Annuities on Lives* (1725) his famous "Hypothesis for the Law of Human Mortality," which, before trustworthy mortality tables existed, was much used in calculating life contingencies. Dr. Richard PRICE published (1st ed. 1771) *Observations on Reversionary Payments*, containing the Northampton Table of Mortality, for many years employed by insurance offices in calculating their premiums and reserves, which, even at the present day, has not been entirely abandoned. FRANCIS BAILY published *Doctrine of Life Annuities and Assurances* (1810); and Joshua Milne, *Treatise on the Valuation of Annuities and Assurances on Lives*, etc. (1815). This latter work contained the Carlisle Mortality Table, the first constructed on correct principles, and which immediately came into very general use. In 1825 Griffith Davies published a tract explaining the nature and use of commutation columns, and a few years later, after his death, his uncompleted *Treatise on Annuities* was published by his executors without date. Also in 1825 Benjamin Gompertz published in the *Philosophical Transactions* his remarkable exponential formula for the law of mortality, which was extended and improved many years later by William M. Makeham in the pages of the *Journal of the Institute of Actuaries*. David JONES's work on the *Value of Annuities*, etc., appeared in 1844, until recently the principal text-book on the subject; and in 1849 Peter Gray published his *Tables and Formulae*, an important volume, dealing principally with the construction of life assurance tables. Lastly, in 1887, the Institute of Actuaries issued its official *Text-Book on life contingencies*, by George King.

[Since the establishment in 1848 of the Institute of Actuaries, its journal has been the medium of publication of all important contributions to the science of life contingencies. The first number was issued in 1851, and it has appeared quarterly, with unfailing regularity, ever since. Many useful papers will also be found in the *Transactions of the Actuarial Society of Edinburgh*, commenced in 1863.] G. K.

INSURANCE, LIFE, LAW AND PRACTICE

OF. The contract of life insurance is a contract under which, subject to the payment of an annual premium by the insured, the insurer undertakes on the death of the insured or some other specified person to pay a certain sum of money to the representative of the insured or, as the case may be, to the insured himself. Unlike the contract of fire or marine insurance, it is not a contract of indemnity in the strict sense, but the person who originally insures must, by virtue of 14 Geo. III. c. 48, have an insurable interest in the life of the person on whose death the payment is promised, and Lord Ellenborough in the well-known case of *Godsall v. Boldero* (2 Smith, Leading Cases) held that such interest must continue up to the time of the claims becoming due; but insurance companies, as a matter of practice, did not take advantage of this doctrine, which was subsequently overruled by the unanimous decision of the court of Exchequer Chamber in *Dalby v. India and London Life Assurance Company* (2 Smith, Leading Cases). According to the doctrine now governing the subject, the existence of an interest at the time of the insurance is sufficient. The question as to the nature of the interest which is required to make a life insurance effective has been frequently before the courts. A creditor has an insurable interest in his debtor's life; a tenant holding a lease terminable at the end of a life has an insurable interest in such life, and every man is deemed to have an unlimited insurable interest in his or his wife's, and every woman in her or her husband's life. A parent cannot insure the life of a child without having a pecuniary interest in the child's life, but a child's burial expenses may be insured. It is very doubtful whether insurances of this class should be permitted, the temptation to crime resulting being so great. The interest in a life policy may be assigned to a purchaser or donee, and it is provided by the Policies of Assurance Act 1867, that this may be done either by indorsement on the policy or by a separate instrument, but an assignment is not effective for all purposes until a written notice of its date and purport has been given to the insurance company.

As a general rule the proceeds of a policy on the life of the insured, unless assigned during his lifetime, form part of his estate and are

therefore subject to the payment of his debts. It is, however, possible since the date of the Married Women's Property Act of 1882 to take out a policy for the benefit of the wife or husband of the insured or of her or of his children, by which means the person for whose benefit the insurance has been effected takes the insurance money without any deduction in respect of debts unless the creditors of the originator of the policy can prove that his object was to defeat their claims, in which case they are entitled to the payment of a sum equal to the aggregate sum of the premiums paid in respect of the policy.

An insurance policy becomes void if the insured life is terminated by virtue of a judicial sentence (*Amicable Assurance Society v. Bolland* (Fauntleroy's Case), 4 Bligh, N. S. 194) and probably also if the life of the insured is terminated by his own act (see *Horn v. Anglo-Australian Life Assurance Company*, 30 ; *Law Journal* (Chancery, 511) if he was of sound mind at the time of committing suicide. It is, however, usual to insert express conditions in the policy, so as to provide against events of the nature described, and which in most cases save the rights of assignees for value. Mrs. Maybrick's case raised the question whether a policy taken out by a husband for the benefit of his wife becomes void if the wife kills the husband. It was held that in such a case the trust in favour of the wife must fail, but that the policy is not avoided, and forms part of the husband's estate (*Cleaver v. Mutual Association* [1892], 1 Q. B., 147).

It is frequently stated in the forms of proposal for life insurance that certain statements to be made by the person whose life is to be insured referring to his health or to the nature of his occupation or possible changes of residence, are to form the basis of the contract between the insured and the insurance company. In such a case the untruth of any such statement invalidates the policy (*Ham-brough v. Mutual Company*, *Weekly Notes*, 1895, p. 18). Insurance companies have, however, frequently begun to restrict the conditions as much as possible so as to make their policies practically indefeasible.

The competition between insurance companies has also produced a great many variations in the scheme of assurance intended to attract customers. It is usual from time to time to grant additions to the sums insured, dependent upon the profits of the company as ascertained on the taking of the periodical valuations. Persons who are willing to forfeit the chance of such bonuses can insure at lower premiums ; or the ordinary premium is paid at the commencement, and a reduction corresponding to the bonus is made whenever bonuses are declared. Some companies also accept reduced premiums at the commencement, so as to attract

persons with small but increasing incomes. Persons who do not like to be burdened with the payment of the premiums during the whole of their life may also, by paying a higher premium at the beginning, secure a certain sum on death by the payment of a limited number of premiums. Thus a person aged 25 may insure the payment of £100 on his death by making 10 annual payments of £4:7s., or 15 of £3:4:6, or 20 of £2:13:8, or 25 of £2:7:6.¹ A person who is desirous of terminating his payments need not forfeit his policy if he has paid the premiums during a certain number of years (2 or 3 years as a general rule), but he may, on giving notice in proper time, receive an immediate cash payment which is called the "surrender value," or he may receive a "fully-paid policy" for a sum payable at his death. Insurance companies do not generally state the surrender values beforehand, but they frequently guarantee a minimum surrender value, e.g. one third of the total premiums paid, and as a rule, pay much higher sums than the guaranteed minima. Thus one company, in the case of a person entered at the age of 30, now allows for a policy for £100, the annual premium being £2:9:4, the sum of £4:3s. after 5 years ; £8:19s. after 10 years ; £21:7s. after 20 years ; £36:17s. after 30 years ; £53:12s. after 40 years. The same company guarantees fully-paid policies for an amount equal to the aggregate of the premiums paid. Policies are also frequently granted for securing sums payable at certain ages or on death, if the insured dies before reaching the age. These assurances which are called endowment assurances are useful for several purposes. Thus, a father who wishes to secure a certain sum for the advancement of a child in life, may do so by paying a corresponding annual sum. In the event of the child's death before attaining 21, the company retains the premiums, but it may also be arranged that the premiums are to be returned, in which case they are of course higher. Thus, an annual premium of £3:1:8 paid from the birth of the child, will secure the payment of £100 on such child attaining the age of 21 ; but if the return of the premiums on death is stipulated for, the premium is raised to £3:10:4 annually. Another purpose for which endowment insurances are taken out is to provide for retirement from a profitable occupation at a certain age. It is possible for a person 30 years old to secure the payment of £100 on reaching 60 years, by paying an annual sum of £3:7:6 ; if the payment is to be made on attaining 65 years, the premium is reduced to £2:19:6.

¹ The figures here given are taken from the tables of various insurance companies, and each case of course applies to the company only from whose tables they have been taken, but they illustrate the general principle.

In case of death before attaining the age in question, the £100 are paid in either case. It is also possible to secure an annual sum payable from a certain age during life by paying an annual premium up to the time of reaching that age. Thus a person aged 30, by paying an annual sum of £2:1:7, may secure an annuity of £10 payable from the time of his reaching the age of 60 during his life; and if the annuity is to commence when the insured reaches 65 the premium is reduced to £1:8s.

The ordinary annuity business of an insurance company enables a person, by paying a lump sum, to secure a yearly income during life, either immediately or from some later date, —this is called a deferred annuity. This annuity business is in reality the exact opposite of the life insurance business; a person insuring his life deprives himself of income in order to increase his estate on his death, whilst an annuitant reduces his estate on his death in order to increase his income. The annuity business is also a sort of protection to insurance companies inasmuch as a miscalculation in the tables of mortality which would produce a loss in one department would produce a corresponding gain in the other. Insurance companies have also provided means for facilitating the payment of estate duties. These duties being payable before probate can be granted, cannot, in the first instance, be paid out of the estate of the deceased; the difficulty is overcome by the insurance company, in return for an annual premium, undertaking to pay estate duty up to a certain amount, which amount is paid direct to the revenue authorities, and can therefore be paid without risk to the company, although the authority of the personal representatives has not as yet been definitely confirmed by probate. There are many other ways in which insurance companies have tried to meet the various contingencies and risks of pecuniary loss which may occur, and new methods are constantly invented to do this in a more efficient and economical way.

The solidity and solvency of insurance companies generally, notwithstanding the complicated nature of their transactions, supply a most convincing testimonial, not only to the prudence and capability of the persons concerned in their management, but also to the truth of the doctrine of probabilities which is the basis of their operations. There is, however, one danger which recent events have made more serious, although it does not seem to have been generally recognised as yet. This is the diminution in the rate of interest in all first-class investments, which of course must materially affect the income whilst not decreasing their expenditure. This makes it all the more necessary to provide some means by which the public can be assured of the solvency

of insurance companies. The advertisements which make a large parade of the total sum of the invested funds ought not to be taken for more than what they are worth, their sufficiency depends entirely on the extent of the liabilities, as to which no idea can be formed by anybody except practised experts, and the public cannot attach any importance to statements not certified by such experts. The Life Assurance Companies Acts, 1870-1872, have recognised this want, and provided that every insurance company must, at intervals of at least five years, obtain actuarial reports as to their financial position, and prepare statements as to their life assurance and annuity business on the basis of such report, which report and statement must be submitted to the board of trade. It is also provided that a separate account should be kept of all receipts in respect of life assurance and annuities, and that all such receipts should be carried to a separate fund, which is to be as absolutely the security of the life policy-holders and annuitants as though it belonged to a separate company carrying on no other business except life insurance and annuity business. It is also required that revenue accounts and balance-sheets containing a number of prescribed details should be prepared annually and deposited with the board of trade. These balance-sheets must contain a detailed list of the investments under prescribed heads. Insurance companies must also, on starting business, deposit a sum of £20,000, which sum may not be withdrawn until the insurance fund has reached £40,000. Means are thus provided for the public to form their own opinion, but as the least prudent companies are generally the most active in touting for business, occasional losses cannot be prevented, though up to the present they have been comparatively rare.

[See arts. on ANNUITY; TONTINE. For law of life insurance: see Bunyon, *Law of Life Insurance*, 3rd ed., 1892.—Crawley, *Law of Life Insurance*, 1882.—Porter, *Law of Insurance*, 2nd ed., 1887.]

E. S.

INSURANCE, MARINE. Marine insurance may be defined as a contract whereby the insurer, in consideration of a premium, undertakes to indemnify the assured, in manner and to the extent thereby agreed, against losses caused by perils incidental to marine navigation. The informal note of the contract, which is drawn up when it is entered into, is called the "slip." The formal instrument, which is afterwards drawn up from the slip, is called a "marine policy." The liability of the insurer under his contract is called, as also in the case of other insurance, the "risk."

Though marine insurance is essentially a contract of indemnity, it is not a formally perfect indemnity, because, for example, in the case of

a valued policy, the sum recoverable may exceed the real loss, while, in the case of an unvalued policy, the sum recoverable may fall short of the real loss, as the amount of the loss is then estimated according to certain arbitrary rules. But this depends rather on inveterate adherence to certain traditional forms of policy than on the nature of the contract itself; for the parties may make any stipulation they please.

The peculiar incidents of marine insurance all flow logically from its character as a contract of indemnity. In the first place it is a contract *uberrimæ fidei*. Hence each party must spontaneously disclose to the other all facts relating to the adventure which are not within the actual or presumed knowledge of the other party. In the second place the assured must have a pecuniary interest in the subject-matter insured, otherwise insurance would degenerate from a contract of indemnity into a mere gaming contract. Thirdly, when the insurer pays on the footing of a total loss, the right of subrogation accrues to him, that is to say, he acquires all rights and remedies of the assured in respect to anything that may remain of the subject-matter insured. Moreover, if the assured elects to treat a constructive total loss as an actual total loss, he can only do so by giving notice of abandonment to the insurer, if there be anything of value to abandon. Fourthly, if the subject matter insured has never been imperilled, or if for any other reason, not due to the fault of the assured, the risk has never attached, the assured is entitled to a return of the premium.

[Arnould on *Marine Insurance*, 6th ed., and McArthur on *Marine Insurance*, 2nd ed. See AVERAGE (MARITIME); BOTTOMRY, LOAN ON.]

M. D. C.

INSURANCE, MUTUAL. Life and fire insurance are sometimes carried on by companies formed on a mutual principle. Marine insurance, ordinarily and in its origin, is a contract whereby one person, in consideration of a premium, undertakes to indemnify another person against the losses incidental to marine navigation. But a custom has sprung up in modern times whereby associations of ship-owners become their own insurers. The members of the association mutually guarantee each other against marine losses. If the members number more than twenty, they must register under the Companies Acts in order to constitute a legal body. The individual guarantees take the place of the premium, and the details of the contract are of course subject to the rules and regulations of the particular association. Subject to these qualifications a contract of mutual insurance is on the same legal footing as an ordinary contract of insurance with an underwriter or insurance company (see *Arnould on Marine Insurance*, ed. 6, p. 152). M. D. C.

INSURANCE, STATE (GERMANY).—*History.* The compulsory state insurance of Germany

grew naturally out of philosophic conceptions of the state that date from the early years of this century. In the voluminous discussion which preceded the sickness and accident laws, in imperial rescripts, in several of Prince Bismarck's speeches, in the *Begründung* of the accident law, we find the idea constantly repeated that the state has wide and various, as well as definite and positive, Christian duties, especially toward the weaker members of society. No one doubts LASSALLE's influence in shaping much social legislation in Germany. He has told us what he owes to two books of FICHTE, one written in 1796, the other in 1800. SISMONDI's work published in 1819 is frequently quoted by those who acted most powerfully upon the preliminary discussion out of which the laws sprang. Sismondi returned from a journey among French manufacturing centres with the same feelings that made Karl Marlo a socialist. Sismondi wrote, "Nous regardons le gouvernement comme devant être le protecteur du faible contre le fort," etc. When Prof. Winkelblech (Karl Marlo) came back from his journey, he not only wrote passionately in this same spirit, but he conceived and clearly expressed the thought of a remedy in universal compulsory insurance. In his *Organisation der Arbeit* (probably written before 1850), vol. ii. p. 328 et seq., he maintains, in a criticism of the liberal school, that no remedy for social evils is adequate save obligatory insurance. Dr. Schaeffle, who is often called the father of this system, was influenced directly and powerfully by Winkelblech.

Even before the Franco-Prussian war the thought which was later elaborated in *Der Korporation-Hülfskassenzwang* appears to have occurred to Schaeffle. Both the theory of the state and the theory of compulsory insurance were therefore waiting upon occasion before the legislation came. After the founding of the *Verein für Socialpolitik* in 1872, the idea of the insurance scheme was kept before the public mind, especially through writings of Wagner, Schmoller, and other *Kathedersocialisten*. Feb. 12, 1879, came the first imperial word from the throne. Another followed in Feb. 1881, and in Nov. of the same year the imperial message was sent forth. From 1874 the extraordinary growth of the social democracy had also influenced many of the conservatives to seek a remedy in compulsory insurance. To this end an agitation was begun in the Reichstag 1878. The ministry of 1879 announced "the government accepts the theory that the working man who has become incapacitated through age or in consequence of his work should not be a burden upon the public," etc. The two attempts upon the emperor's life in 1878, while they led to strong repressive measures against the socialists, gave rise also to positive reforms. At the opening of the Reichstag in 1879 the emperor referred directly to the anti-socialist

law, adding an earnest wish that the house would co-operate in a series of positive social reforms initiated by the state. This historic relation to socialism is of signal importance in any attempt to appreciate or criticise this legislation.

Insurance against Sickness.—The first law (against sickness) passed by a powerful majority June 15, 1883. Sick funds or associations already centuries old were taken as a basis. These older *Knappschaftskassen* were even compulsory among Prussian miners as early as 1854. The law of 1883 makes this compulsion universal. To give elasticity and freedom seven forms of associations are established.

(1) Local sick fund, managed by townships for different branches of trade. (2) Factory funds. (3) Building funds. (4) Mining funds. (5) Trade or guild funds. (6) Free funds that may be managed with greater independence, being only obliged to do at least as much for the labourer as the law prescribes. (7) Communal fund, including those who do not fall under either of the above funds. Both payments and receipts under these seven associations differ in details. The law does not fix any weekly amounts, it is left to each insurance office to fix them, see § 20 of the law. Generally the sick receive relief during 13 weeks—

(1) for medical treatment, including medicines and appliances, (2) in case of complete disability, at least one half the average wage of the place in which he works. As a precaution the pay begins on the third day of sickness. The sick may be taken to a hospital and half his wage given to those dependent upon him. (3) An amount at death for burial expenses equal to twenty days' wage. (4) Women at time of childbirth are supported during three weeks. This insurance is supposed to represent a money value very nearly $\frac{2}{3}$ the average wage. The labourer himself pays $\frac{2}{3}$ and the employer $\frac{1}{3}$ of the amount, although, as in the old age and invalidity law, many employers pay both contributions, thus adding directly to the wage. Recent statistics show nearly 8,000,000 insured, and more than 100,000,000 marks go yearly to sick relief alone. It is estimated that the employer pays 3.69 marks *per insured*; the employed, 10.09 marks; that the relief averages 11.77; the management and costs, 0.81 marks; and the funds, 9.72. Sickness averages 15.7 days at an expense of 32.41 marks. The relief per 100 insured (sick persons), male 37.4 marks, female 31.8, total 36.3. Relief per 100 marks for sick pay, 47.91; doctor, 19.97; medicine, 16.04; hospital, 10.49; burial, 4.28; child-bed, 1.31.

The law against *Accidents* passed 6th July 1884, came into operation 1st October 1885. Several amendments extend the principle practically to the entire wage-earning class, a part of this amount to the injured and to his survivors. Both sick and accident laws will eventually

insure nearly 17,000,000 of people. The proposed extension of the law to widows, orphans, and house industry will come into effect as early as practicable. Even if the sickness is caused by accident, the sick fund must bear the burden until the beginning of the fourteenth week. This throws a large proportion of lesser hurts wholly on to the sick funds. Help is rendered under the accident law even if the accident is caused by sheer negligence of the labourer. Wilful self-injury alone is excepted. The responsibility of insuring the labourer is wholly with the employer. The simple fact that one is a wage-earner alone constitutes one a member of an insurance society. Small officials with salary below 2000 marks (£100) yearly are included. The pecuniary burden also is thrown wholly on the employers. The principle of *le risque professionnel* is fully accepted, it being supposed that employers, under such definite responsibility, would guard against accident costs for which they alone have to pay.¹ The management is through trade associations of employers with mutual liability. Premiums are based upon wages, and are determined yearly by estimates of wage or salary during the previous year, and also upon the extent and kind of risk to which the given trade subjects the labourer. Elaborate schedules of danger are used to determine the risks in the different industries. From the end of the thirteenth week of incapacity the injured receives (paid through the post office) while absent from work, two-thirds his usual wage. If only partly incapacitated medical attendance is supplied, and in case of death, a sum equal to twenty times the daily wage goes to the family for funeral expenses, and an annuity to the widow; one-fifth of the husband's earnings to each child till the fifteenth year, 15 per cent of such earnings, or one-fifth, if the child is motherless. The entire annuity may in no case exceed three-fifths of the father's earnings. A board of arbitration composed of employers and representatives decide disputed questions, the imperial insurance bureau in all cases having final judgment. This higher commission is composed of three permanent members including the chairman. These are appointed from proposals of the Bundesrath, by the emperor, and hold office for life. Four non-permanent members are chosen by the Bundesrath, two by the trade associations, and

¹ Of the delicate question of personal responsibility for accidents, it should be said that an employer who causes an accident, even by negligence, is liable to the injured for an excess of the award above what the law gives. They must be responsible to the trade association, or sick fund, which pays in first instance, for the full amount. Other persons are liable for the whole damage. The various charitable unions have still the same duties as before, though their expenses may be paid by the trade association. So that compensation for industrial injuries becomes a certainty. The certainty is of a nature that has almost wholly done away with the constant litigation under the employers' liability law of 1871, and is considered in this respect throughout Germany an improvement of first importance.

two by representatives of the workmen. The non-permanent members hold office four years. The imperial bureau can command books, witnesses, correspondence, and all documents necessary to the decision of any question in dispute. The expenses of this bureau are borne by the empire. Its accounts are laid yearly before the Reichstag. In 1890 there were 64 industrial trade associations, and 48 agricultural associations. These include 390,622 trades classed as industrial, with 4,843,621 separate agricultural interests, 4,926,672 and 8,088,698 persons are included in these respective interests, *i.e.* above 5,000,000 of businesses (*Betriebe*) with more than 12,000,000 of insured persons. The entire outgo of these associations exceeds 36,000,000 marks with reserve funds of 55,000,000. The law was extended to the carrying traffic in May 1885. Here the empire or the state has direct control instead of the trade association. The extension of the law (15th March 1886) to military officers and soldiers has rather to do with pension than insurance legislation. May 5, 1886, the law was applied to agriculture and forestry, in which the work is of such uniform character that the institutions could conform to state, provincial, or county lines. Calculations are not here made upon the wages of the injured but upon an average rate of agricultural wages. Direct taxes like the land tax may be made the basis of assessment. The building and marine accident law passed in 1887. The most important change here is that, in the "deep building"¹ a single trade association for the empire was formed, and the method by assessment gave place to a charge on capital² (*Umlageverfahren durch Kapitaldeckungsverfahren*). To estimate results properly, it should be seen that the lighter accidents—nearly 90 per cent—come under the sick law. [The labourers really contribute to the *accident fund inversely* to the employers' contribution to the *sick fund*, *i.e.* the labourers bear 11 per cent of the accident burdens while the employers bear 33½ per cent of the sick-fund burdens. These facts gave the basis for common representation upon the arbitration of both employer and employed.] The cost per accident is about 200 marks. Compensation per 100 marks 68·66 marks to the injured, 21·35 to survivors, 8·61 for cure, 1·38 for burial. In 1890 the employers paid, per person insured, 2·98 marks, expenses of compensation, 1·40, management, 0·40, funds, 5·52. It is significant that the

most skilled physicians are more and more called for all serious cases. This is unquestionably setting a higher standard of health restoration both in cities and country. Fifty-six of the sixty-four trade associations have already adopted measures of *prevention* against accidents. It has been found that the best skill and elaborate preventive methods pay in the long run.

The last law—invalidity and old age—dates from 22nd June 1889. It was early conceived to be necessary for the completion of the scheme. The two previous laws passed with strong majorities, the last with a small hesitating one. Its first distinction from the other laws is that it applies not to any special business or branches of any trade, but to the whole mass of the "working population," so long as wages do not reach £100 yearly. At least 12,000,000 of workers will fall under this form of insurance. Beginning with the sixteenth year, men and women are classified according to their wages in four different classes.

- Class 1, up to 350 marks yearly, for which 14 pfennigs are paid weekly.
- Class 2, up to 550 marks yearly, for which 20 pfennigs are paid weekly.
- Class 3, up to 850 marks yearly, for which 24 pfennigs are paid weekly.
- Class 4, above 850 marks yearly, for which 30 pfennigs are paid weekly.

As payments are not made when the insured is out of work (unless from free choice) only forty-seven weeks are "paying time" in the year. This allows for sickness and idle time.

The contributions during the year (forty-seven weeks) would thus amount to—

3s. 3½d.	for class 1st.
4s. 8½d.	" " 2nd.
5s. 7½d.	" " 3rd.
7s.	" " 4th.

These payments are made half by employers, half by the labourers, the state adding to each paid annuity a yearly subsidy of 50 marks. The annuity is due at the completion of the seventieth year. It is distinctly the purpose of this law to give only enough to guard the insured against actual suffering. It is paid, however, even if the insured is earning full wages. Thirty years of contribution ($47 \times 30 = 1410$ weeks) give claim to the pension. If no time is lost, twenty-seven years suffice to secure the annuity. No separate contributions are necessary for the old-age pension, as this is covered by the invalid insurance claims. If one who is drawing old-age pension secures invalid pension, the former is discontinued. All who have contributed five years, and are permanently disabled, receive the invalid pension at whatever age the disability falls. If an accident disable him, he draws invalid pension, only in case he does not fall under the accident law. "Invalidism," under the third law, is supposed to cover only permanent disablement. This dis-

¹ "Tiefbau" is the building of bridges etc. as distinguished from houses "hochbau."

² The expression "charge on capital" requires some explanation. The difference between "Umlageverfahren" and "Kapitaldeckungsverfahren" is this—According to the first-named system assessments are made in each year to cover the losses of the previous year. According to the second system (which is the ordinary insurance system), fixed premiums are paid out of which reserve funds are formed for the payment of losses.

ability is defined as unfitness to earn one-fourth the usual wage. If thereafter the labourer becomes able to earn more than this sum, his payments may be in part or wholly withdrawn. It is estimated that ten times as many persons will draw invalid pensions as those that draw old-age pensions. It is expected that eventually a sum of 250,000,000 of marks yearly will go alone for invalid pensions. The annuities from incapacity are reckoned on a basis of sixty marks, increasing in proportion to the contribution.

Class (1) 350 marks	2 pfgs. ($8\frac{1}{2}$ pfngs. = 1d.)
" (2) 550 "	6 "
" (3) 850 "	9 "
" (4) 850+ "	13 "

One who had for example made 100 payments in class (1), or 100 \times 2 pfg. = 200 pfgs.; 150 payments in class (2), or 150 \times 6 pfg. = 900 pfgs.; 50 payments in class (3), or 50 \times 9 pfg. = 450 pfgs.; 300 payments in class (4), 300 \times 13 pfg. = 3900 pfgs.

Here the insured who had paid during the 600 weeks would receive 2·00 + 9·00 + 4·50 + 39·00 = m. 54·50. The state adds 50 m. The minimum basal annuity is 60 m. If he had had 40 weeks' sickness and served 10 weeks of military duty, for which time the state pays, we have the following result to add to the above 600 weeks' payment in the four classes.

	Marks
1. By the state	50·00
2. Basal annuity	60·00
3. Affixed stamps in the 4 classes	
during 600 weeks	54·50
40 weeks' sickness 40 \times 6 ¹	2·40
Military service 10 \times 6	0·60
	167·50

This amount (167·50 marks) represents the invalid pension, which may at any time, and in any case, be reckoned simply as above shown.

To secure the old-age pension, contributions must have been made thirty years (30 \times 47). As this would have caused great injustice to those approaching the seventieth year, it was decided to give the pension earlier to those who, at the time the law took effect, had passed the fortieth year of age. One, for example, who had in 1891 reached the age of forty-seven, would have, instead of 30 \times 47, only 23 \times 47 weeks to contribute, i.e. his years for contributing would be lessened by as many as he had already passed the fortieth year. One who was nearly seventy would have only to show that he had worked regularly 141 weeks before the law came into effect in 1891.

Here the 1st wage class has a pension of 4 pfg.	
" 2nd "	6 "
" 3rd "	8 "
" 4th "	10 "

If a man completing his seventieth year has

¹ Time of sickness and military service is reckoned as in second class, i.e. 6 pfgs.

paid during 1800 weeks (500 in 1st class, 400 in 3rd class, 900 in 4th class), and had been sick 50 weeks, and served 40 weeks as soldier (or 90 weeks under 2nd class), his account would stand as follows:—

900 in IV. Class	
400 " III. "	
90 " II. "	
20 " I. "	

1410 weeks.

or the exact number of weeks the law demands. As only 1410 are required, 480 of the 500 in 1st class are omitted.

We have thus—

	Marks
(1) State payment	= 50·00
(2) 900 " IV. class at 10 pfg.	= 90·00
(3) 400 " III. "	8 " = 32·00
(4) 90 " II. "	6 " = 5·40
(5) 20 " I. "	4 " = 0·80
	178·20

as the pension.

In case of any sickness so serious as to make permanent disability probable, the insurance authorities may secure such extra medical attention as they see fit, though the insured can make no such claim. The payments are made in stamps, to be had at every post office. The stamps are affixed to a card containing fifty-two spaces. The cost of the stamps is 14, 20, 24, and 30 pfg., according to the wages received. These payments are made by the master, who is supposed to deduct one half the sum from the weekly wage. As a fact it is more and more common for the employer to pay the whole for the more personal service, as the deduction is found to create dissatisfaction, especially with the servant class. In Baden the "sticking," which has caused so much unpleasantness in Germany, is done by the officials. The employer pays, to an official who calls at the door, a lump sum. When the card is filled, a record of it is made at the office, and a new one issued, so marked as to show where the previous card may be found. To women who marry half the sum of their actual contribution is restored without interest, and to the widows and dependants of men who die before receiving the pension, provided contributions have been made for at least five years. The actual burden to the state of paying for time of military service, and for its officials, is estimated at 8,000,000 marks yearly. This does not include the extra burden upon the post office, nor the vast service that is rendered without compensation. It is claimed that the costs have not thus far risen above the estimates. In 1891, 132,917 claims for old-age pensions were allowed costing 16·63 millions of marks; 6·65 millions fell to the government's share. The average pension was 125·08 marks.

The advantages to the labourers are said to be far greater than any which private companies

could give, as the insured get the state subsidy and the contributions of employers without cost to themselves. After five years of contributions, the yearly invalidity pension is five and a half times greater than all the contributions of the insured. In the first year (1891) 132,917 annuities were given (15,306,754 marks), and nearly 100,000,000 marks received for stamps.

When the "stability stage," *Beharrungs-zustand*, is reached, about 1,500,000 persons, in a population of 50,000,000, will receive benefits equal to 330,000,000 marks annuities (£16,500,000). The three laws together will eventually distribute annually about 500,000,000 marks (£25,000,000).

[See *Special Report Commissioner of Labour*, U.S.A., 1894, by John Graham Brooks. Two Bills intended to effect the compulsory insurance of the wage-earning classes of Switzerland against sickness and accident were issued, Sept. 1895. Also PENSIONS, OLD AGE, App.] J. G. B.

INSURANCE AGAINST SICKNESS. See INSURANCE, STATE.

INSURANCE THEORY IN TAXATION. See TAXATION.

INTEGRAL AND DIFFERENTIAL CALCULUS. The integral calculus provides a method of great importance in all branches of science which require the aid of mathematics, enabling us to deal satisfactorily with variable quantities, such as are far beyond the reach of the ordinary methods of arithmetic and algebra. Its object is to provide a means of adding together quantities which are so small as to be individually imperceptible, but so numerous that their sum is a perceptible quantity. This can only be done in one class of cases, where the quantities are the small increments by which a variable quantity increases from moment to moment. The method of procedure is to compare the small increments of an unknown quantity with small increments of a quantity upon which the changes of the first quantity depend. The change resulting from the united effect of these small increments can then be deduced from the known quantity by the process of *integration*, which is, as its name implies, the fundamental operation of the calculus, thus:—Let x and y be two variable quantities, which are not independent, so that if x varies y must vary also. Let x change to $x + \Delta x$ (where Δx denotes a small increase in the value of x) and y in consequence changes to $y + \Delta y$; then the increase of y is to the increase of x in the ratio $\Delta y : \Delta x$. Now the differential calculus tells us that when Δy and Δx are sufficiently diminished, the fraction $\Delta y / \Delta x$ approaches a definite limit which can always be found, and is denoted by the expression dy/dx : this expression is called the differential coefficient of y with respect to x , and the finding of it is the fundamental operation of the differential calculus. If, then, we know the ratio L of a small

increment of an unknown quantity y to the corresponding increment of a known quantity x , in the notation of the differential calculus $dy/dx = L$. In the notation of the integral

calculus $\int_{x_0}^{x_1} L dx$ measures the amount by

which Y has increased while x has changed from x_0 to x_1 ; x_0 and x_1 are called the limits of the integral. Suppose we know the value of y , say b , corresponding to any particular value,

say a , of x , then $y = b + \int_a^x L dx$ gives the

general value of y in terms of x . The symbol \int was originally an S standing for

sum; $\int L dx$ meant the sum of the quantities obtained by multiplying the increments of x by the variable quantity L .

The differential calculus provides a method of comparing quantities which are so small as to be individually imperceptible, but bear to each other a finite ratio. *Differentiation* is the process of finding this ratio when the small quantities are the increments by which two quantities, whose variations are mutually dependent, increase from moment to moment. Suppose the magnitude of a variable quantity y depends upon that of another variable x : then y is called a function of x . If x be increased by a small quantity Δx , y will be increased correspondingly by a small quantity Δy . The fraction $\Delta y / \Delta x$, as Δx is continually diminished, approaches a certain definite limit denoted by dy/dx and called the differential coefficient of y with respect to x . Of course the quantity dy/dx is a function of x , so that it can be treated in the same way as y has been: the expression $d(dy/dx)/dx$ or d^2y/dx^2 is called the second differential coefficient of y with respect to x . This process may be continued *ad infinitum*. It is as an introduction to the higher branches of mathematics that the differential calculus is valuable; while it can very seldom be employed alone for the direct elucidation of a problem, without it, higher mathematics could not be employed at all.

The following example is taken from Marshall's *Principles of Economics*, vol. i. appendix note 1. Let h be a pleasure of which the probability is p , and which will occur if at all at a time distant t : let r be the rate of interest per unit, which must be added to present pleasures before comparing them to future, and let $R = 1 + r$; then the present value of the pleasure is phR^{-t} . If ω be the probability that a person will derive an element of happiness Δh , from the possession of say a piano in the element of time Δt , then the present value of the piano to him is $\int_0^t \omega R \frac{dh}{dt} dt$. If we are to

include all the happiness that results from the event at whatever distance of time, we must make the upper limit of the integral infinity. The same

appendix contains many examples of the use of the calculus in economic reasoning.

[The ordinary text books in use are those of Todhunter, Williamson, and Edwards, on the *Differential*, and Todhunter and Williamson on the *Integral* calculus.—Greenhill, *Differential and Integral Calculus*, gives a very rapid insight into the methods and capabilities of the calculus, but is very difficult.—Wicksteed, *Alphabet of Economic Science*.]
A. E. S.

INTENSIVE CULTIVATION means the cultivation of the soil by agriculturists who use artificial means to increase its natural fertility. It is the only practicable method of cultivating a fixed plot of land, and it is the opposite of the "extensive" cultivation of nomad farmers who "arva per annos mutant et superest ager," Tacitus, *Germ.* 26 (comp. Horace, *O.*, III. xxiv. 14; Caesar, *B. G.*, iv. 1; Marshall's abstract of the reports to the Board of Agriculture, Midlands, p. 17), or where each, like the Yorkshire farmer a century ago, "every year . . . ploughs up a fresh part of his sheepwalk to take a crop or two, and then lets it lie fifteen or twenty years" (A. Young's *Northern Tour*, ii. 14). Pastoral methods leaven unscientific agriculture. The application of science, at first to prevent exhaustion of the soil, characterises non-nomad or intensive agriculture. This expression accordingly means scientific cultivation.

Scientific cultivation includes—(1) the rotation of crops on a double, triple, or quadruple system. The double system is described in Virgil's *Georgics*, i. 73, and in A. Young's *Political Essays*, p. 153. The latter writes (1772), "It is in some parts of England, and in many of France, the practice to divide a farm into two parts; half every year sown with wheat and the other half fallow." This double or convertible system only differs in degree from that of the Yorkshire farmer referred to. The triple system was introduced into England in Henry III.'s reign, the quadruple by Lord Townshend last century (Prothero's *Pioneers and Progress of English Farming*, pp. 4, 42). (2) Drainage had its first scientific English exponent in 1649, its latest in 1834 (*ib.* pp. 97, 249). (3) Spade husbandry was advocated by Sir H. Platte, "author of *Adam's Arts Revived*" ("Compleat Husbandman," S. Hartlib, p. 6), in 1601. (4) As for manuring, marling, and liming, the first was an incident of mediæval villen tenures, the last two are devices of peculiarly English origin (Fitzherbert's *Book of Husbandry*, ed. Skeat, p. 134; cp. Sir R. Weston's "We have lime and marl of which they know not the use," *Brabant Husbandry*, p. 4). (5) Bones were introduced in 1772, and their use soon made general by Coke of Holkham. (6) Nitrates date from 1839; then came guano; then machinery. Discoveries have ceased since 1851, according

to Sir J. Caird (Ward's *Reign of Queen Victoria*, vol. ii.). As for results, Sir J. Lawes's experiments at Rothamsted, annually detailed in the *Royal Agricultural Journal*, show how wheat can be grown for fifty consecutive years (cp. Prout's *Profitable Clay-farming*), and that properly-dressed grass-land yields two or three times as much as undressed grass-land (Caird's *Landed Interest*, pp. 24 and 39), agricultural thus in its turn reacting on and leavening pastoral methods.

Political economists base upon intensive cultivation—(1) a justification of property in land. These processes, they say, "alter" land, make the useless useful, and increase land qualitatively if not quantitatively, thus making it like any other commodity (Mill's *Pol. Econ.*, ii. 2, 5; Laveleye's *Primitive Property*). (2) Or they argue for security to the capitalist-cultivator: thus improving-leases of twenty-one years were recommended by Sir R. Weston in the 17th, Lord Townshend and Mr. Coke in the 18th century, and now by Sir J. Caird on these grounds. (3) Those who advocate peasant proprietorship as the best stimulus for intensive cultivation, quote A. Young's "the magic of property turns sand to gold"; "give a man secure possession of a bleak rock and he will turn it into a garden; give him a nine years' lease of a garden and he will convert it into a desert" (*Travels in France, 1787, 30th July, 7th November*)—remarks elicited from a partizan witness by the effects of peasant proprietorship in Flanders. (4) Intensive cultivation doubtless illustrates the law of diminishing or limited returns (see J. H. Hollander, *The Concept of Marginal Rent, Quart. Jour. of Econ.* Jan. 1895; S. N. Patten's *Premises of Pol. Econ.*, ch. vi.; and Sidgwick's *Pol. Econ.*, bk. ii. ch. vii., note); and the principle of specialising growth to soil illustrates an opposite tendency (Carey's *Principles of Social Science*, i. 106, 107; cp. Mill's *Pol. Econ.*, bk. i. ch. xii. 3). The first should not therefore be pursued to the exclusion of the second principle—this is probably the meaning of Mr. Prothero's "Agriculture cannot hold its own by intension against extension" (p. 123). Sir J. Caird, however, discusses a case in which reliance would and could be placed on the first as a temporary substitute for the second principle, viz. supposing war cut us off from foreign supplies (*Landed Interest*, pp. 19 and 20).

J. D. R.

INTERCURSUS MAGNUS, or (Treaty of) Great Intercourse, was the name given by contemporaries to the treaty of 1496 between Henry VII. and the Archduke Philip, re-establishing trading relations between England and the Netherlands. It indicates no fundamental change of policy on either side, and did little more than restore earlier conditions and customs. The joy with which it was received, and the

designation given to it, are to be explained by the fact that, owing to the support given to Perkin Warbeck by the Duchess Margaret, trade between the two countries had been suspended for two years. To the English weavers the market for their cloth furnished by the Netherlands was already valuable, while the Netherlands needed English wool and the privilege of fishing in English waters, so that the suspension of intercourse caused great distress on both sides.

[Schanz, *Englische Handelspolitik* (1881), ch. i.—The text of the *Tractatus Pacis et Intercursus Burgundice* is in Rymer, *Fœdera* (2nd ed. 1727), xii. 578 seq.] W. J. A.

INTERCURSUS MALUS, or (Treaty of) Evil Intercourse, was the name given by the Netherlands to the treaty of 1506 between Henry VII. and the Archduke Philip, by which trade was re-established between England and the Netherlands on more favourable terms for the former, after a temporary suspension due to political complications.

In future English merchants were to be allowed to sell their cloth in the Netherlands in both large and small quantities, and no penalties were to be imposed upon the purchasers. The carrying out of this treaty would have seriously affected the woollen manufactures of the Netherlands, and the Archduke had probably only been compelled to accept it by the tempest which cast him upon the English shores. The treaty was never confirmed; and, although a new treaty was signed in 1507, Henry was obliged to abandon his claim so far as it concerned English cloth.

[Schanz, *Englische Handelspolitik* (1881), ch. i.—The text of the treaty is in Rymer, *Fœdera* (2nd ed. 1727), xiii. 132.] W. J. A.

INTERDICT (Scots law term). Equivalent to prohibitory injunction. A. D.

INTERDICTION AQUÆ ET IGNIS, the ordinary form of Roman banishment under the republican constitution of the Roman state. It was carried into effect by a decree of the people being passed declaring a person to be in exile, and prohibiting every one from supplying him with fire and water so as to prevent his return. Fire and water were the symbols of religious purity, —to deprive a citizen of these was to cut him off from all communion with the state, and so to free it from the contamination of his guilt. Such banishment was accompanied by loss of citizenship.

[Smith's *Dict. of Antiq.*, s.v.] E. A. W.

INTERDICTION. There is a procedure in the law of all countries by which persons suffering from certain diseases or propensities (weakness of intellect, insanity, idiocy, etc.) may be subjected to all or some of the incapacities to which infants are subjected under the general law. This procedure, in Scotland as well as in French-speaking countries, is called "inter-

diction." The Italian term is "Interdizione"; in German-speaking countries the term "Entmündigung" is used. The same or a similar procedure may, in Scotland as well as in all continental countries, be also used in the case of persons of wasteful or extravagant disposition, if their relatives have reason to fear that they would, if unchecked, waste their property. The disabilities which may be attached to prodigals are not, however, identical in all cases with the disabilities to which persons of unsound mind are subjected. Thus in France prodigals are not subject to "interdiction" in the ordinary sense, but they may be prohibited from entering into certain transactions without the concurrence of a person appointed by the court, who is called "conseil judiciaire" (see Code Civil, art. 513), and a similar rule applies to all interdicted persons in Scotland, there being a special procedure for persons of unsound mind in the strict sense. In Scotland there is also a "voluntary interdiction," which enables a person to protect himself from his own weakness of intellect or facility of disposition.

The fact that England and the countries deriving their law from England do not recognise the right of any person to prevent the extravagance of a relative by judicial proceedings, is closely connected with the other fact that the law of the same countries allows persons to dispose of the whole of their property by gifts *inter vivos* or by will without considering their issue or other relatives, whilst in Scotland, as well as in continental countries, the wife or husband and the descendants, at least, are entitled to a certain portion of the property, which cannot be taken away by gift or will. According to the view of Scots and continental law, the head of a family is more in the position of a trustee than of an absolute owner; in England this is not so as a matter of law, but the universal use of family settlements shows that, after all, the Scots and continental law is in accordance with the natural disposition of mankind. E. S.

INTERDICTION (Scots law). Restraint directed against extravagant management of real estate by persons liable to be imposed upon may be by a voluntary bond not to do anything which may affect heritable estate without the consent of persons named in the bond, called "interdictors." Or it may be judicial, imposed by authority of the Court of Session, sometimes at the instance of near relatives, occasionally at its own hand. The interdiction is published by being registered in the General Register of Inhibitions, Edinburgh; and it then operates to render voidable any dealings with the realty only, except such as shall have been effected with the consent of the interdictors, or such as may be onerous (for adequate consideration) or rational (reasonable). The person interdicted may even himself raise

an action to have his improper transaction annulled.

INTERDICTUM was a formal order of a Roman magistrate commanding the party to whom it was addressed to do or abstain from doing something. In many ways it corresponds to the interdict of Scots law, and to some extent to the injunction of English law.

[*Gaius*, iv. f. 139, 140; *Institutes of Justinian*, 4, 15, § 8.]

A. D.
E. A. W.

INTERESSE TERMINI. The interest that a tenant at common law has in a lease granted to him before he enters on the premises. A lease at common law is regarded before entry as a contract only; after entry the tenant takes an interest in the land.

[Goodeve's *Real Property*, 3rd ed., 1897.]

J. E. C. M.

INTEREST.

Theory of, p. 426; Interest and Usury, p. 426

THEORY OF. Interest is the name given to that which is paid for the use of a loan. This payment often includes elements of a nature different from that which is strictly called interest. If there be any probability that the loan will not be repaid, the borrower will be compelled to add something to his offer in order to induce the lender to risk his capital. Often, too, what goes under the name of interest includes the allowances which must be made for the maintenance of the full value of capital subject to wear and tear. These allowances for depreciation and risk being made, and duly subtracted from the *gross interest*, there remains the *net interest*, the pure payment for the use of the loan apart from contingent risks, etc.

It is not proposed here to review the various theories which have been advanced to account for the existence of interest. For a review of these in detail the reader may be referred to E von Böhm-Bawerk's *Geschichte und Kritik der Kapitalzins-Theorien* (translated under title *Capital and Interest*, by Professor W. Smart), where they are one by one examined for the purpose of showing that they are unsatisfactory, preparatory to the enunciation of Professor von Böhm-Bawerk's own theory. We shall merely give here the principal heads of the classification adopted in *Capital and Interest*. These are as follows:

Productivity theories. Interest is the price of the productive services of capital. Malthus, J. B. Say, Von Thünen, Carey, and Leroy-Beaulieu are named as some of the chief exponents of this group of theories.

Use theories. Interest is the price paid for the use of productive capital. The line of division between this and the former group seems far from clear. J. B. Say is named as the founder of the theory, which has been elaborated by German writers in the main, among whom Hermann, Mangoldt,

Schäffle, Knies, and Menger are some of the chief names mentioned.

Abstinence theories. Interest is the payment made for abstaining from unproductive use of wealth. The leading exponents of this theory named are Senior, Cairnes, and Cherbuliez.

Labour theories. Interest is the wage of the capitalist's labour, which, in some statements, means the labour which created the capital. The chief exponents of these theories are James Mill, Courcelle-Seneuil, Rodbertus, and Schäffle.

Exploitation theories. Interest arises from the exploitation from the labourer of the wealth which he alone produces. Rodbertus and Marx are the leading supporters of these theories. Besides these principal groups, Turgot's fructification theory, a group denoted *colourless theories*, including, among leading writers, Ricardo, Torrens, McCulloch, M'Leod, and Rau, and a number of minor, or composite, systems, represented by Molinari, Roscher, Cossa, Jevons, Hoffmann, J. S. Mill, and Henry George among others, are dealt with more briefly.

In rendering an account of interest, we have to account for two phenomena. The first is that it should be necessary to guarantee to lenders not merely the repayment of the principal of the loan, but of a further sum. The second, that borrowers should be willing to pay such additional sums, or, to put the same matter otherwise, that they should prefer to borrow and to repay a sum greater than that borrowed, rather than to abstain from borrowing at all.

It may be said that lenders ask for interest because they know it can be obtained, and that they simply take all they can get. While this is true, it is also true generally that if the payment obtainable by way of (net) interest be increased or decreased owing to any cause whatever, the disposition of lenders to make advances responds to such changes of the conditions of loans; and the amount of capital available to borrowers depends on the terms they are able to offer. In regard to the other side of the question, it is not sufficient to urge that sheer necessity for ready capital accounts sufficiently for the offer of a premium in order to obtain it. This may be quite enough when we consider the case of a spendthrift, or that of an individual who finds himself unexpectedly called upon to meet demands beyond his means, but it does not suffice to account for the deliberate borrowing by merchants and manufacturers for the purpose of extending their business operations, borrowing which they would clearly avoid if it did not promise to yield them a profit over and above the sum paid by way of interest on their loans.

Böhm-Bawerk in his account of the matter dwells on the fact that immediate enjoyment is preferred to a remote though certain enjoyment, precisely equal in all other respects, or, to use more general terms, that present goods are worth more than future goods of equal amount. He deduces the result that the repayment with interest, at the end of the period of the loan, is a payment of a value precisely equal to that borrowed; that, to use an illustration, if the rate of interest be 5 per cent, £105, a year hence, has precisely the same value now as £100 in hand.

To take into account the difference in valuation of present and future goods is doubtless essential in our problem, and it has long been recognised that this is the case. It is, however, hardly sufficient of itself for the complete solution of the problem, and some of the contentions urged in the theories which Professor von Böhm-Bawerk rejects need to be given a place even co-ordinate with that assigned to the substitute which is offered.

In stating the theory, it is necessary to insist on one point, namely, that we are considering the rate of interest on current loans and current investments, that is to say, the rate of *net* interest on present investments either in new or old enterprises. The fact that old investments return to the investors rates either greater or less than the rate actually paid on current loans is discounted by the changes in price of the shares in such enterprises.

We have, in addition to accounting for the willingness of borrowers to pay interest, and for the unwillingness of lenders to make loans without interest, to attempt to render some account of the influences determining the actual rate of interest.

Let us first consider the borrower's side of the question, and consider, not the case of a borrower forced to obtain ready money to meet his engagements, but of a borrower who can choose whether he will borrow or not, and is influenced by the prospect of realising profit or loss on the transaction.

The use of capital in industry, as has been so often pointed out by writers on economics, enables the producer to adopt indirect methods of production in place of direct processes, and these are adopted because, though the product is, by their means, obtained only after considerable delay, its amount is largely increased as compared with what is obtained by processes yielding a more immediate return. From the increased product, besides the wages of labour and the reward of the entrepreneur and the rent of any land used in the process, the capital itself must be replaced, a due allowance be made for the risk involved of complete or partial loss, and we have then left, in general, a sum available for payment of interest. We may conveniently refer to this as the net yield

of capital. It is the net amount by which the product is increased through the adoption of the indirect in place of the direct process of production. It must be clear that this net yield is not likely to be identical in all the different avenues open for the investment of capital. In some it will be greater, in some less. Those investments which promise the greater net returns will be sought after in preference to those which can offer only the less. A borrower who is in possession of an opportunity for using capital thus productively will be deterred from increasing his borrowings if the expected returns be less than he must pay for the loan, but stimulated to increase his borrowings in the opposite case.

If we suppose that the amount of capital which can be borrowed is limited, we may also assume that the richer fields for investment are first occupied, and that gradually the poorer opportunities are utilised as far as the capital available will permit. This tacitly assumes that the amount of capital available is limited independently of the rate of return offered. In this case then, the investments would proceed till the available capital was exhausted and the rate of expected net return on the poorest investment actually made would be the rate of interest obtainable on loans, if we suppose all the capital lent at the same rate, for this poorest investment would not be made on our hypothesis if the rate to be paid were greater than the rate which it is anticipated will be earned.

Since the amount of capital offering for investment is not fixed, but varies with the expected return, the above investigation requires some modification. We have indicated, however, the nature of such change as must be made. If, for precision, we assume the market rate to be 3 per cent per annum, we may conclude, from the point of view here taken, that those who can offer a *net* return of 3 per cent or more are all able to obtain the capital they can employ at this rate, while those opportunities for investment which promise any smaller return cannot be developed so long as the lending rate does not fall.

In thus expressing the conditions of the equilibrium rate, we have partially anticipated the other side of the question, the lender's position. The explanation of interest as the reward of abstinence on the part of the lender has been the subject of a great deal of ridicule at various times, and the notion that the lending of large sums by millionaires involves a degree of painful abstinence proportioned exactly to the magnitude of the sum lent is, indeed, calculated to provoke ridicule (see especially Lassalle's *Herr Bastiat Schulze-De-litzsch*). Professor Marshall has preferred to substitute the word *waiting* for the word *abstinence*, and to speak of interest as the reward of

waiting, so as to avoid the association of ideas which suggests inevitably that abstinence involves self-denial, even to a painful degree.

It is certainly true that the amount of capital which can be borrowed depends in general on the (net) rate which can be offered in payment. The owner of goods, or of the means of obtaining goods, which can be used in production may be conceived as having the choice of entering on production himself, of lending to another, or of obtaining and consuming unproductively the value of the wealth which is at his disposal. Whether he will do the one or the other is largely determined by the rate obtainable by lending, or by employing capital himself. The satisfaction afforded by present consumption is balanced against the satisfaction to be obtained by the opportunity of increased command of the means of satisfaction obtainable by postponing consumption. Doubtless very large sums might be lent if the return obtainable were far less than even at present. The supply of loanable capital might be large even if interest were zero, but, on the other hand, as the rate rises, the supply undoubtedly increases. If, again, for the sake of precision, we assume that 3 per cent per annum is the actual rate, most of the capital actually lent would probably be lent if the rate were below 3 per cent, but not the whole. The last additions to the supply, tempted out by the last increment in the rate payable, may not unfairly be supposed to be lent under circumstances where the actual interest obtained, or bargained for, is regarded as the equivalent of the postponement of consumption, and not more than that equivalent.

The actual rate being 3 per cent, those who are willing to lend find investments for all the capital on which they are content to take interest at 3 per cent or less, while capital which they are unwilling to lend at rates not greater than 3 per cent remains unlent.

The case of interest may, therefore, be said to be comparable with the ordinary cases of equilibrium of demand and supply, the equilibrium rate being such that lenders willing to take that rate or less find investment for their capital at that rate itself, while opportunities for utilising capital in production so as to obtain a return equal to, or greater than that rate, are utilised.

In the case of capital actually invested and not transferable from an unprofitable to a profitable employment, the actual yield affects the valuation of the capital, this valuation being such as would, at the current rate of interest, produce the net yield obtained. Thus the valuation of capital sunk in productive or unproductive enterprises may be vastly greater or much less than its value when the investment actually took place. Such changes

in valuation are only capable of producing an indirect effect on current rates of interest, and that mainly by influencing estimates of future returns to new investments.

Changes in the level of interest may be due to causes affecting either the demand for or the supply of loanable capital. Scientific discoveries and useful inventions extend the field for profitable investment, and, by affording more abundant opportunity of realising large returns, tend to raise the rate of interest. Changes in the influences which affect the accumulation of capital or the willingness of lenders to accept a return of given amount, such as changes in the estimate of the future in comparison with the present, tend to increase or decrease the supply of capital offering at every rate possible, that is to say, tend to cause equilibrium to be established at higher or lower rates as the changes are in the direction of limiting or of increasing the supply.

The influence of changes in the value of money, inasmuch as such changes affect the actual return obtained from investments, and cause it to be different from the nominal return, is of importance in modifying the market price of loans. Further, readiness of realisation is of great importance to many investors, and a lower rate of interest is often accepted when it is of importance to be able to recover the value of the capital invested without loss of time and with a minimum of cost. These circumstances find their place in the general theory, modifying some of its details, but without altering the broad outlines which are sketched above.

[The remarks which conclude the article on "Capital" apply equally here. Böhm-Bawerk's references to the writers whom he criticises may be consulted in seeking the views of particular writers, those writers whose theories are, in their main outlines, similar, being treated together so far as possible, and footnotes indicating the parts of their writings where their theories may be sought. In particular, reference may be made to Roscher's *Political Economy*, bk. iii. ch. iv., to Marshall's *Principles*, bk. vi. ch. vi. (2nd ed.), to Common's *Distribution of Wealth*, and to bk. ii. ch. vi. of Sidgwick's *Principles of Political Economy*. See also Cliffe Leslie's essay on the *History and Future of Interest and Profit*, and the interesting discussion in Wiesner's *Natural Value*, bk. iv. and ch. xi. bk. v.]

Besides the treatment of interest in systematic treatises, a considerable amount of valuable discussion of many points in the theory has taken place in various periodical publications. A sketch of Böhm-Bawerk's theory was given in the *Quarterly Journal of Economics*, April 1889, and the issue of the English translation of his treatises provoked a lively discussion in that Journal, in which Professor Walker joined in July 1892, in a sense unfavourable to the Austrian writer. This continued till the end of 1893, and has been revived by the appearance of the first

instalment of Böhm-Bawerk's reply to his critics in January 1895. Among articles in German periodicals, an appreciative notice of Böhm-Bawerk's work by Knut Wicksell in *Jahrbücher für Nationalökonomie und Statistik*, may be mentioned. The *Political Science Quarterly* and the *Annals of the American Academy of Political and Social Science* have also contained occasional articles on the subject which was being debated in the *Harvard Journal*. In a contribution to the *Annals* in November 1893, Professor Arthur T. Hadley seeks a justification of interest on the ground that it affords the best available method of effecting a proper selection of employers. Among discussions of the objections to interest on moral grounds, Prof. H. S. Foxwell's article on "The Social Aspect of Banking" in the *Journal of the Institute of Bankers*, February 1886, may be referred to. Prof. Smart's article, "The New Theory of Interest" in the *Economic Journal*, December 1891, gives a brief account of Böhm-Bawerk's theory, convenient for those who do not desire to read his works themselves.] A. W. F.

INTEREST AND USURY. "Interest," as distinguished from "usury," the older name, now always employed in an objectionable sense, is usually taken as meaning a moderate, in opposition to an excessive, return exacted by a creditor for the loan of capital. This connotation has a certain historical justification. The word "interest" (*interesse*) really refers to the compensation which under the Roman law was due from the debtor who had made default. The measure of compensation was *id quod interest*, the difference between the creditor's position in consequence of the debtor's laches and the position which might reasonably have been anticipated as the direct consequence of the debtor's fulfilment of his obligation. From this idea of compensation has come that of profit on the loan of money, for which the Latin technical term was *fenus* or *usura*. The evil significance of this last term arose from the fact that, despite the laws limiting interest, the most exorbitant rates were charged by aristocratic Roman money-lenders to provincials (Cic. *ad Att.* v. 21, § 11). In primitive societies the return of a payment, whether in money or kind, for the loan of capital, using this word in its widest sense (cp. Levit. xxv. 36, Deut. xxiii. 19), appears to have been sometimes an unknown, always a repugnant practice. This repugnance is to be accounted for by the fact that in early stages of civilisation loans are employed, not as capital, for profitable production, but for consumption, and are consequently needed, as a rule, by persons in want. To exact not only a return for the commodity consumed or for the money spent, but something more besides, appears to be to take advantage of a neighbour's necessities. Tacitus observes of the Germans that both interest and usury were unknown among them: "*Fœnus agitare et in usuras extendere ignotum*" (Germ. 26).

Where the practice of lending on interest prevailed in early societies we naturally find high rates, and as a consequence the existence of a class of debtors who in default of payment, whether of principal or interest, have been adjudged slaves to work off the debt. Caesar (*B. G.* iv.) tells us that Orgetorix had a great number of debtors in his service, and after the Germans had been brought into contact with Roman civilisation, they followed the Roman law of reducing debtors to slavery when insolvent. This was probably the mischief against which the Mosaic law guarded by its prohibition to the Jews to lend upon usury except to strangers (Deut. xxiii. 20), a prohibition authoritatively interpreted by a Sanhedrim of seventy Jewish doctors in 1807 to include interest in any sense. That the Mosaic injunction was not observed appears from Nehem. v. 7 foll., which recounts a restitution to Jewish debtors of the lands on which money had been advanced by Jews at the rate of 1 per cent per month (Salvador, *Histoire des Institutions de Moïse*, iii. c. 6).

The practice of enslaving the insolvent debtor, common alike to ancient Egypt (Diod. i. 79), Greece, and Rome, was abolished at Athens by the *Seisachtheia* of Solon (B.C. 594) which, according to some ancient writers, included a reduction of the rate of interest, stated by Plutarch to have been about 16 per cent (Plut. *Solon*, 13). In the opinion of Mommsen no restriction was put by it upon interest. At Coreyra, in the 2nd and 3rd centuries B.C., loans on good security commanded 24 per cent, while the common rate at Athens in the time of the orators was 12 to 18 per cent. These high rates, so far as they are not to be attributed to the risk run by the creditor, are partly due to the dearth of capital, partly, as Roscher has pointed out (*Ansichten der Volkswirtschaft*, i. 18), to the cheapness of labour, the rate of interest being determined by the returns to capital which in slave states absorbs all that is produced except the barest minimum of subsistence. But such high rates are exceedingly oppressive to agriculturists, whose fortunes are always precarious. It was principally for the benefit of this class that the *Seisachtheia* of Solon was passed, and it was from the same class that the characteristic words for interest both in Greek and Latin (*τόκος*, *fenus*) were borrowed. Interest was "produce." Upon this turned the logomachic argument of Aristotle against interest, that coin could not breed, and that, therefore, money derived from the loan of money was unnatural (*Polit.* I. x. 4, 5). This point of view, though it arose out of a coincidence of terminology, for centuries dominated European thought. Aristotle, in fact, was seeking justification for the general sentiment against those who lent money on interest. But that he tolerated

interest appears from a passage in the *Ethics* (IV. i. 40) in which he ranks among those who ply illiberal trades "lenders of small sums at high interest," i.e. in the common acceptance of the word, usurers. So with Plato, who is generally represented as altogether condemning interest. It is true that he forbids the payment of interest in his ideal state, but in the same passage (*Laws*, v. 742) he also forbids repayment of capital, and these prohibitions must be interpreted not as of general import, but in conjunction with his desire to exclude private possession of wealth. In another passage of the same work (xi. 921 c) he expressly enjoins the payment of an obol per drachma monthly by way of interest, i.e. 200 per cent per annum, in case of wilful neglect to pay, after the lapse of a twelvemonth, for goods received. It must be remembered that the Greek sentiment against money-lenders was not confined to that class, the literature from Homer to Aristotle treating with scarcely less disdain the callings of the merchant and the manufacturer.

The ancient law of Rome allowed interest; which, as usual in agricultural communities, reached an exorbitant height. As at Athens, so in the early history of Rome, popular suffering necessitated a readjustment of debts. The law of the Twelve Tables (B.C. 451-450) first, according to Tacitus (*Ann.* VI. xvi. 3), limited the rate to $\frac{1}{3}$ th part of the capital, *uncia, unciarum fenus*.¹ The hatred in which money-lenders were held is visible in the provision mentioned by Cato (*De Re Rustica* proem.), that they were condemned for transgression of the law to twice as high a penalty as the thief. In B.C. 347 interest was fixed at 5 per cent: in B.C. 342 it was abolished altogether by the Lex Genucia. But the nobility controlled the civil procedure through the pretorship, and as the law did not bind any but Roman citizens, the evasion was practised of issuing loans in the names of Latins and allies (Livy, xxxv. 7). By the Lex Sempronia (B.C. 194) this mode of evasion was suppressed. Although the prohibition of interest long remained law, it was found impracticable. The consequence probably was, according to the opinion of Montesquieu and Adam Smith, a rise in the rate of interest to compensate the creditor for increased risk, and accordingly, during the economic crisis of B.C. 89, which followed the Social War and the Asiatic troubles, prosecutions of creditors by dishonest debtors took place. These were eventually put an end to in the following year by the Lex Unciaria of the consuls Sulla and Rufus, which fixed the rate of interest at 12 per cent per ann. This rate was known as *centesima usura*, i.e. $\frac{1}{10}$ th part of the capital per month. By a decree of the senate

in B.C. 50 this became the legal limit throughout the Roman provinces.

The dislike felt by the Romans to the exaction of interest showed itself in the remedies granted by the law against the debtor. While in the case of a sum of money lent (*pecunia certa credita*) the creditor could enslave the person of his debtor for the unpaid principal, he had only a civil remedy against his property for the interest. Creditors accordingly hit upon the device of bringing claims for interest under the form of actions for money lent, and thereby enforcing the judicial enslavement of the debtor (*addictio*). This legal artifice was put an end to by the Lex Poetelia in B.C. 325, which further allowed a debtor in temporary difficulties to surrender his property. But as regarded the really insolvent, the old law remained in its severity, so far as the principal of the debt was concerned. It is to the credit of Julius Caesar that by the *Lex Julia de bonis cedendis*, he revolutionised the law of Rome and laid the foundation of all modern systems of bankruptcy by allowing the debtor to formally cede his estate and enter upon a "new financial existence, in which he could only be sued on account of claims proceeding from the earlier period and not protected in the liquidation, if he could pay them without renewed financial ruin" (Mommson, *Hist. Rome* bk. v. ch. xi.). Such remained substantially the state of the law until the time of Justinian (A.D. 533). Justinian fixed new rates of interest. Whereas in the case of *fenus nauticum* or bottomry, there had been no limit, he reduced it to a maximum of 12 per cent per annum. Compound interest was not allowed, nor could any claim for arrears of interest be made for a larger amount than the amount of the principal debt. The new rates were adjusted to a classification of ranks, presumably constructed upon the basis of a hypothetical ability to pay interest. While the maximum payable by merchants and business men was 8 per cent, that for persons not in business was 6 per cent, while distinguished personages, *illustres*, and agriculturists, ranked together as capable of paying 4 per cent. This classification probably suggested the later doctrine of the canonists, that all questions involving profits or interest must be considered relatively to the class of society concerned. All mediæval legislation regarded the suitable maintenance of rank as essential to the welfare of society (see *SUMPTUARY LAWS*). The Roman law also laid the foundation of two other doctrines which became corner-stones of the canonists' teaching. It has been seen that even Plato allowed a penal interest of 200 per cent in cases where a debtor had wilfully neglected, after a year's delay, to discharge his obligation. Such delay was technically known in Roman law as *mora*, and even in cases where interest was not otherwise payable,

¹ *Fenus unciarum*, $\frac{1}{3}$ th or $\frac{8}{9}$ per cent for the lunar year, therefore 10 per cent for the solar—*usura centesima*, 1 per cent per month, 12 per cent per annum. Ramsay, *Roman Antiquities*, p. 420.

as in *fideicommissa*, it became due upon proof of mora, subject to the discretion of the judge (*Dig. lib. 19, tit. 1, 49, 1*). The fact that the rate of interest due for mora was determinable by the rate locally current, suggests that the ground of the adjudication was that the creditor had been prevented dealing profitably with his money in the interval, which is the doctrine of *LUCRUM CESSANS*, as expounded by the canonists. Further, by the Roman law mora with its penalties was incurred by the debtor for any consequential loss to the creditor. This became the canonical doctrine of *DAMNUM EMERGENS* (*q.v.*).

The early ecclesiastical history of interest has already been given (*CANON LAW*). In England it was forbidden by two northern synods in 787. Before the Conquest, canonical and secular provisions were placed side by side in the compilations of the Anglo-Saxon kings. William the Conqueror, by his separation of the work of the bishops' courts from the work of the sheriffs' courts, paved the way for the study and application of canonical principles, which took place in the 12th century. The real founder of the study of mediæval canon law in England was Theobald, Archbishop of Canterbury (1139-61). Its codification began in the reign of Henry III. To this age belong the constitutions of Richard Poore, Bishop of Salisbury, 1217-28, which forbid the taking of the produce of a pledge after the principal sum has been received from it *deductis expensis*. A contemporary canonist, one of the very few English authors on the subject, was Thomas Chabham (or Chobham, fl. 1280), who wrote eight books, *De Casibus et Poenitentibus*. He was also the author of *Casus aliquot de pignoribus et in quibus latet Usura*. Both these treatises are in MS. in the British Museum. He defines usury as *incrementum feneratoris ab usu crediti*, a definition which embraces interest. But it is remarkable that when William Lyndewode collected the constitutions of the Church of England in the reign of Henry V., a collection which formed the canon law of the realm, scarcely any mention of usury occurs. Possibly this was a concession to the claims of the lay lawyers to take cognisance of the practice of exacting interest as an offence against the common law (see *ENGLISH EARLY ECONOMIC HISTORY*). In 1364 Edward III. empowered the city of London to issue an *ordinatio contra usurarios*. But parliament complained of the practice of usury in 1390, and a more explicit *declaratio usura* was issued by the mayor of London. This defined the offence of usury to consist in the lending "gold or silver to receive gain thereby, or a promise for certain without risk" (*CANON LAW*). There is much to show that these condemnations of usury were prompted by hostility to the Italian financiers who practised the taking of interest in transactions effected by bills of exchange. Repeated

complaints of this were made by the Commons, the belief being general that by means of bills of exchange the kingdom was depleted of the precious metals. This is expressed in the *Libelle of Englyshe Polycye* (1436). With the cessation of the Wars of the Roses a marked development of credit set in, and though the charging of interest on bills of exchange was still subject to ecclesiastical and popular reprobation, we learn from Pauli's *Three Memorials* that a class of native exchangers had sprung up in England. Upon the accession of Henry VII. a reaction took place. The control of policy was in the hands of John Morton, Archbishop of Canterbury, chancellor, and afterwards cardinal. Morton was a canonist, who had been a leading counsel in the ecclesiastical courts, and on the opening of parliament in 1487 delivered a speech condemning the practice of usury and unlawful exchange, that is, exchange in which interest was reckoned. (See *DRY EXCHANGE*; and *MORTON'S FORK*). In the same session an act, which bears marks of ecclesiastical influence, was passed against both. The act condemned under the term "new chevesaunce" the loan of money at fixed interest to begin from a certain date. The "Acte agaynst exchaunges and rechaunges" specially struck at accommodation bills. The "Acte agaynst usury and unlawfull bargaynes" (3 Hen. VII. c. 5) gives examples of the way in which the ecclesiastical laws against usury were evaded. Sometimes the form of a sale was gone through, the object sold being an obligation, and the advance for a less sum than the obligation acknowledged being taken in exchange, a system which continued down to the time of Jeremy Bentham, and is described by him. Sometimes a pledge, as a horse, was delivered up, of which the creditor enjoyed the use without setting it off, as he was bound by canonical law to do, *pro tanto* against the principal. Sometimes the device of sale and resale was resorted to. This was the fictitious sale of goods to the borrower on credit, and their repurchase at a less sum of ready money paid by the lender. The sum booked against the borrower included both capital and interest, while the goods remained in the lender's hands. Sometimes a bill of *DRY EXCHANGE* (*q.v.*) was drawn. Sometimes a gratuity was promised by way of interest. All these evasions were in use on the continent, and had been condemned at numerous synods both there and in England. The offence under the act of 1487, of demanding a fixed percentage, was based on the old canonical doctrine that no claim for interest arose except in the case of *DAMNUM EMERGENS*, and perhaps also in that of *LUCRUM CESSANS*, and that these could not be estimated beforehand (*CANON LAW*). In this respect England, by the act of 1487, fell behind the contemporary doctrine and practice of the continent. The

act proved a failure, in the opinion of the framers of its successor, owing to the unskilfulness of the drafting. In 1495 Morton again addressed parliament upon the evil, and introduced a fresh "acts agaynst Usury" (11 Hen. VII. c. 8). This repealed the act of 1487. Under the new act the stipulation for interest at the time of the making of a loan was the offence. But a clause "savyng lanfull penalties for noupayment of money lent," by allowing the fixing of *pœna conventionalis*, or *usura punitoria* (CANON LAW), opened a wide loophole for evasion. Sale and resale were defined as illegal when the borrower was at the time *in neccessite*. Mortgages in which the creditor should not account for mesne profits were condemned, there being no "aventure" attached to the loan to justify the creditor in receiving them as interest. From this time the law remained unchanged for fifty years. Nevertheless the practice of taking forbidden interest continued, as may be gathered from contemporary popular writers. To some extent it was condoned by being included specifically or implicitly in the general pardons issued from time to time by Henry VIII. The customary rate of interest at this period was 10 per cent upon good security. After the assumption by Henry VIII. of ecclesiastical supremacy in 1544, "all offences of usurie and corrupt bargaynes" were excepted (35 Hen. VIII. c. 18) from the general pardon; but in the following year, for the first time in the history of England, the demand of a fixed rate of interest was made legal by 37 Hen. VIII. c. 9, which repealed the act of 1495. The maximum was to be 10 per cent per annum. By a clause intended to cover some of the canonical justifications of a contract for the payment of interest, opportunities were afforded for the evasion of this maximum. The importance of the act is that it was a clear breach with the canon law, which recognised no quantitative distinction between usury and interest. It is upon the distinction created by this act that our modern conception of the two rests. The act caused lively remonstrances on religious grounds. The reforming party, as a rule, followed LUTHER (*q.v.*) in his earlier view of the sinfulness of interest. In 1552 Northumberland, who posed as an extremist in religious matters, passed a bill through the Lords "against usurie," which became law (5 & 6 Ed. VI. c. 20). This was a drastic prohibition of interest in any shape or form, a clean sweep being made of all the canonical exceptions justifying interest. Probably the customs of London based on the canon law were maintained, as having received regal confirmation. Attempts were made in the following year, without success, to mitigate the severity of the new act. It is doubtful whether the government of Mary permitted the enforcement of a law repugnant to the ecclesiastics as a defiance of the canon

law, especially as the chancellorship was in the hands of Gardiner, bishop of Winchester, and afterwards of Heath, archbishop of York. In 1558 Mary herself offered the city of London dispensation from the penalties of taking usury if they would advance her a sum of money at 12 per cent interest. But the act of 1552 remained unrepealed until 1571, when Elizabeth re-established the rate of 10 per cent (13 Eliz. c. 8).

With the Reformation the canonist doctrine naturally came up for review. The general trend of the opinion of reformers, and this was shared by Luther in his later years, was that interest was tolerable as a concession to human frailty. This argument was adopted by Bacon. But CALVIN and Dumoulin, better known as MOLINÆUS, a French jurist, were not satisfied with a negative protest against the intolerant prohibitions of ecclesiastical dogma. They reopened the whole question *ab initio*. In a letter to Cœkolampadius, Calvin boldly questions the Aristotelian logomachy on which the patristic and scholastic position was so largely based. Money, he argued, was not fruitful; but neither was a house, which, it was admitted, could lawfully be let for profit. He pointed out that the concessions made by the canonists in fact involved a license to take interest, and that the persistence in a verbal prohibition was "puerorum instar ludere cum Deo." But he adopted, as matter of Christian discipline, the rule that interest should not be demanded of men in urgent need, and as matter of state discipline, that the legal rate should not be exceeded. Molinæus (*Tractatus Contractuum et Usurarum*, 1546) founded his justification on the Roman law that there is inherently involved in a loan an *interesse*, whether in the shape of "lucrum cessans" or of "damnum emergens." This justification of interest, which brought upon Molinæus the censures of the church, naturally found favour in the great mercantile and Protestant community of Holland. Grotius, while assenting to Molinæus's criticism of ARISTOTLE, nevertheless hesitated to explain away the language of Scripture which had been for so many ages accepted as prohibitory (*De Jure Pacis ac Belli*, II. xii.). This step was taken by SALMASIUS in 1638 when professor at Leyden, who in fact popularised the arguments advanced by Molinæus.

In England the prohibition of 1552 having proved a failure, Elizabeth in 1571 re-established the rate of 10 per cent. In 1624 the rate was reduced to 8 per cent. The principle being practically conceded, discussion ranged about the question of a legal rate. The wealth of Holland towards the end of the 17th century being accompanied by a low rate of interest, led to the conclusion formulated by Sir Josiah Child in his new *Discourse of Trade*, first published in 1668, that the relation of the two was that of

effect and cause, and that prosperity might be secured for this country by a reduction of the legal rate of interest to 4 per cent (Child). But this opinion was combated by other contemporary writers. Of these the best known is Sir William Petty, who in 1682 published a treatise under the title *Quantulumcumque*, condemning altogether laws regulating the rate of interest. LOCKE is generally taken to have written in the same sense; but though the arguments in his tract, *Considerations of the lowering of Interest and raising the Value of Money*, tend in this direction, he expressly adduces two reasons why there should be a law to regulate interest. His first is that there may be a rule of practice for courts of law in assessing debts and damages. Such a rule of practice prevails at the present day. His second reason is that thoughtless borrowers, "young men and those in want, might not too easily be exposed to extortion and oppression," a line of thought afterwards adopted by Adam Smith.

In the meanwhile the new doctrines made but slow headway in Roman Catholic countries. It is true that successive refinements of the canonists in deference to the advancing exigencies of commercial life had left nothing but the husk of the prohibition remaining. But a defence of interest upon its own footing, following the lines of Calvin and Salmasius, was too venturesome an assault on the position so long maintained by the church. Even as late as the reign of Louis XIV., interest on commercial debts was forbidden, with an exception in favour of the flourishing industrial city of Lyons; nor did interest become legal until the revolution. In England, opinion had so far passed over to the opposite camp that Adam Smith, writing in 1776, assumed interest as necessary to production in providing the capitalist with an incentive to productive expenditure. About the same time in France, Pothier, a French jurist, and the celebrated TURGOT resumed the ancient controversy as to the justification of interest.

The occasion which produced Turgot's essay on *Les Prêts d'Argent* was a commercial crisis in Angoulême in 1769. A feature of this crisis was an excessive number of accommodation bills upon advances to borrowers for purposes of unproductive consumption. Notwithstanding that the legal rate of interest in France was at this time 4 per cent, there were, as Adam Smith tells us, "several very safe and easy methods of evading the law." The bankrupt borrowers, unable to obtain further advances, followed the example set by Richard II. of England, and combined to prosecute their creditors under the usury laws. Turgot, at that time intendant of Limoges, procured the removal of the cases from the local courts to the council of state, and drew up for its guidance a memorandum, "Sur les Prêts d'Argent," in defence of interest. In this

treatise, which was not published till some years later, he first establishes the necessity of interest for commercial and industrial purposes; he then refutes the arguments of the schoolmen; he inquires into the historical causes which have rendered money-lenders odious; and concludes by demanding that the taking of interest should be legalised and the rate left to be settled between borrower and lender. Like Adam Smith, he adopted the standpoint of individualism, that a man has a right to do what he will with his own, and that, on the whole, this liberty is most conducive to the general well-being. Turgot also addressed himself to the arguments advanced by Pothier and his school upon legal grounds. Their contention was that in a contract which is not gratuitous, equity demands an equality in the values exchanged. One party should not give more than he has received, nor the other receive more than he has given. This maxim of equity is violated when the lender receives back more than the capital. The argument was, as Pothier admitted, a reproduction of that of the *res fungibiles* of Aquinas (see AQUINAS; FUNGIBLES). Turgot's reply is first, that equality of values depends on the opinion of the two contracting parties as to the degree to which the objects exchanged will satisfy their demand; secondly, in this following Molinaeus, he challenges the fundamental position upon which the prohibition of interest had been based, viz. that a loan is a transfer of property, and that an owner of property (the transferee) cannot be called upon to pay for the use of that which is his own. "Misérable équivoque encore," replies Turgot, "il est vrai que l'emprunteur devient propriétaire de l'argent considéré physiquement comme une certaine quantité de métal. Mais est-il vraiment propriétaire de la valeur de cet argent? Non, sans doute, puisque cette valeur ne lui est confiée que pour un tems et pour la rendre à l'échéance" (*Mémoire*, § 27). Turgot's memoir saved the money-lenders of Angoulême, and so far effected a change of public opinion in France that at the Revolution the national assembly declared all loans on interest legal. The work of Turgot in France was finally done for England by Jeremy BENTHAM (*q.v.*) in his celebrated "Letters in defence of Usury." In these he finally disposed of those pleas for legal maximum rates based on the assumed necessity of protecting the simple and discouraging the prodigal, which had been accepted by Locke and Adam Smith. In England the whole of the acts against usury, dating from that of 1545, were repealed in 1854. For the list of them see the schedule to 17 & 18 Vict. c. 90. In Denmark they were repealed in 1855; in Spain in 1856; in Sardinia, Holland, Norway, and Geneva in 1857; in Saxony and Sweden in

1864; in Belgium in 1865; and in Prussia and the North German Confederation in 1867.

A new act against usury was, however, introduced for the whole of Germany in 1880, and amended and extended in 1893. It is now a criminal offence to obtain a profit by taking advantage of the necessitous condition or inexperience of any person in reference to loans or other transactions, "exceeding the usual rate of interest in such a way that the profit seems out of proportion to the service rendered," and all transactions of this nature are null and void; it is also a criminal offence to "trade as a usurer."

Professor Foxwell, while avoiding any justification of the claim to interest upon abstract, moral, or metaphysical grounds, and anticipating the possibility of the arrival of a time when the tendency of interest to a minimum may result in a natural compulsion upon the capitalist to pay a "negative interest" to the banker who undertakes the care and management of his capital, justifies interest upon the practical ground that it is necessary in the existing state of society as an inducement to the capitalist to save. It is interest which "brings about economic equilibrium" between the demand for capital, of which the function is to give labour more effective power and continuity, and its accumulation.

The tendency of profits, including in this term the bare interest upon capital, to a minimum, has been discussed at length by J. S. Mill. Mill assumes that there is "some particular rate of profit which is the lowest that will induce the people of that country and time to accumulate savings and to employ those savings productively." This rate is determined by (1) "the strength of the effective desire of accumulation"; (2) "the degree of security of capital engaged in industrial occupations." These two determinants interact and grow in force with the progress of civilisation. In a country where population is increasing, capital becomes increasingly applied to agricultural industry, which progressively yields less (see DIMINISHING RETURNS), a law which conditions the whole rate of profit. Where population is not increasing, the competition for labour causes a rise of wages, with the same result. The counteragents to the tendency are therefore the loss of capital in commercial crises and unsound investments; inventions, cheapening articles of common consumption, and thereby reducing the cost of labour; and importation of food from abroad.

It is to be observed that Professor Foxwell's view that there is no absolute minimum is more probable than that of Mill, who underestimated the force of the tradition of accumulation. Hence, Böhm-Bawerk throws modern theories into three classes. The first of these, to which he gives the name the "naïve produc-

tivity" theory, attributes the production of interest to capital, which in the distribution of the product only claims that of which it was originally the source. The second, which he calls the "socialist exploitation theory," regards interest as the appropriation of that which is due to labour, out of which it sprang, labour being the sole source and measure of value. The third view is intermediate. While accepting the first view of capital as being in conjunction with nature and labour a source of production, it dwells upon the importance of exchange values in determining the amount which can be appropriated by the capitalist. While the first two theories confine their attention to interest as a problem of production, "the interest problem in its last resort is a problem of value" (Böhm-Bawerk, *Capital and Interest*, trans. by Smart, Macmillan, 1890; *Conclusion*, p. 423).

While Adam Smith accepted interest as an economic fact without endeavouring to justify it on analytical grounds, he indirectly furnished a basis for a revival of the whole question of its justification. In discussing the sources of wealth, Adam Smith, while he frequently mentions land and capital, leans to the doctrine that wealth was exclusively derived from labour. This position was borrowed from Locke, who lays down that labour "put the difference of value on everything" (*Civil Government*, bk. ii. ch. v. § 40). Ricardo, like Adam Smith, without elevating the proposition into a system, adopts the general idea. As to this, see Professor Marshall's note on Ricardo's theory of production in relation to value (*Principles of Economics*, bk. vi. ch. vi.). From this it was an easy transition to the view of the modern socialists, that interest is abstracted—wrongfully abstracted—from labour. The connecting link between the two views is the French economist SISMONDI in his *Nouveaux Principes d'Economie Politique*, first published in 1819. Sismondi escapes the logical conclusion of the theory by ascribing the right to interest to the original labour which forms capital. The scientific socialists, however, claiming to rest their teaching upon Adam Smith and Ricardo, regard the returns to capital, whether called by the name of profit or interest, as a fraud upon the labourer to which hunger compels him to submit.

Of this school PROUDHON was the earliest distinguished representative in France; in Germany, ROBERTUS JAGETZOW and KARL MARX. According to Robertus, interest—profit and rent alike—rests on two grounds, one economic, the other legal. The economic ground lies in the fact that since the introduction of division of labour the labourers produce more than they require to support themselves in life, and so allow them to continue their labour, and thus others are also able to live upon the product. The legal ground is the existence of private property in land and capital, and Marx reproduces the same idea. In the view of the anti-socialist economists, these conclusions are only arrived at by divorcing propositions of Adam Smith and Ricardo from their context and ignor-

ing the fact that capital is in itself productive and belongs to the capitalist as the reward of abstinence from its expenditure. The economists who earliest insisted on the first of these characteristics of capital were J. B. SAY and Lord LAUDERDALE, while N. W. SENIOR, formerly professor of political economy at Oxford, is the founder of the abstinence theory (CAPITAL). Eclectic economists, such as Roscher, include both these elements.

The American economist, Mr. F. A. Walker, turns the point of the old Aristotelian and canonical objections to interest by insisting that in actual fact, exemplified by cases in which no coin passes, as well as in theory, interest is paid for the use of the objects for the acquisition of which credit is given or money lent. He leans to the modern view that in the states of society in which prohibitions of interest originate, there may have been justification for them, and they probably exercised some effect. These conclusions he applies to similar conditions in modern communities, as for instance, in extensive regions of the United States, where agriculture is prosperous, where industry has made some progress, yet where the community still remains mainly non-commercial. But he agrees that in highly commercial countries "usury" laws become purely mischievous.

Recent English economists, such as Mr. Sidgwick, show the natural English tendency, exemplified in Adam Smith and Ricardo, to abandon discussion of the metaphysical justification of interest, and accepting it as an ultimate fact, to confine themselves to analysing the economic laws by which its rate is determined.

The general conclusions of economists as to the determinants of the rate of interest may be summarised as follows. In civilised communities a general level of "net" interest tends to establish itself, the differences between rates being for the most part due to differences in the risk of the investment. That on the whole, in such communities, small command less interest than large amounts of capital owing to the difficulties of collection and the irregularity of withdrawal. Of this savings banks are an example. The mere increase of capital does not lower the rate of interest (Hume, *Essay on Interest*; Ricardo, *Principles*, ch. xxi.), which is determined, on the analogy of Ricardo's theory of rent, by the competition of borrowers and its least productive employment. Hence, as a community increases in civilisation, and capital has to be employed on less fertile lands and less productive investments, the return to capital tends to decline; in other words, interest falls. Influences which counteract this tendency are the acquisition by a nation of fresh land or a cheapening of the means of subsistence by the abolition of protective duties; the conversion of circulating into fixed capital (see CAPITAL); the destruction of capital by war, and the emigration of capital.

Within the limits of the Roman Catholic communion the principle has constantly been upheld that to accept usury is sinful. This was laid down by Bossuet in his *Traité de l'usure*, and repeated by Benedict XIV. in the encyclical on usury of 1745 intitled *Vix pervenit*. But

when the era of the reformation opened up the whole question, the energy of the canonists was devoted not to fortifying the old positions, but to emptying the principle of its application. Concessions were at first made in those directions in which the severity of the prohibition had from early times been mitigated. Rent-charges upon land, and their purchase and sale, had been canonically legal since 1425, subject to the charge being really attached to land or fixed property yielding actual returns. But in 1452 a bull of Nicholas V. had permitted the inhabitants of the kingdoms of Aragon and Sicily to enter into contracts for the payment of interest on loans based on personal credit (*census personalis*). Against the principle of this concession a reaction took place under Pius V., who, by a bull *Cum onus* in 1568, reverted to the old limitations. But the concession of Nicholas V. had already done its work. The Jesuit casuists, solicitous to adapt the church to contemporary exigencies, discovered a number of reasons for disregarding the new bull. It required, they affirmed, to be invested with authority by promulgation and acceptance in the several countries of Europe. Others, as Liguori, maintained that it only prohibited such loans where fraud was present. Though Benedict XIV. lent his sanction to the condemnation of the *census personalis*, the system continued to flourish even in Rome itself. Another concession which opened the door to the ruin of the whole system was that known by the name of the *contractus trinus* (see ECK, Johann). This, as its name imports, was a combination of three contracts. The first of these, which laid the foundation for the others, was the contract of partnership in risk of profit or loss (*societas*) which had always been allowed. The two subsidiary contracts were contracts of assurance. By the surrender of a part of his expected profit the capitalist could insure himself against loss of capital; by the surrender of a further part he could insure a fixed return (*venditio lucri incerti pro lucro certo*). Now regarded together, and as between the same parties, these three contracts represented an advance of money at a fixed rate of interest. As such they were before the 16th century canonically illegal, though each taken by itself, where the parties were different, was legal even though in respect of the same transaction. Convenience suggested that all these contracts should be made between the same parties, and commerce naturally adopted this plan. As usual in the history of interest, it remained for the theologians to find a justification for the *fait accompli*. This was accomplished by Eck and Major early in the 16th century. But, as in the case of the *census personalis*, so in this, the Catholic reaction at first, by the bull *Detestabiles* of Sixtus V. in 1583, condemned the *contractus trinus* as usurious and illegal. The new school of

casuists, on the other hand, took up the position that the condemnation only applied to cases where usurious practice was potent. Finally, as in the *census personalis*, commercial convenience smothered the protests of doctrine.

In short, by the 17th century the condemnation of usury had been gradually extruded till it had no application outside loans pure and simple. And even in this sphere the concession which had then firmly established itself of allowing the LUCRUM CESSANS and DAMNUM EMERGENS to be calculated beforehand at a fixed rate per cent, left little more than a mere husk of doctrine. The question came up for review before the Roman curia in 1740. The city of Verona raised a loan at 4 per cent, and justified its proceeding by a discourse published by an eminent lawyer, Scipio MAFFEI. The pope, Benedict XIV., issued a special commission to cardinals, prelates, and theologians, to restate the doctrine of usury according to the most recent view. Of this commission the outcome was the encyclical *Vix pervenit* issued in 1745. The old doctrine was reaffirmed, and returns of interest upon loans condemned, except in cases where the claim to interest rested upon some other title than merely that of money lent, or could be justified by the conformity of the contract to one of those forms recognised by the church as legitimate. But the discussion by theologians was not silenced. At last in 1822 an event happened which again compelled the Roman curia to deal with the subject practically. A female penitent at Lyons was refused absolution for receiving legal interest from invested property. She appealed to Rome, and the holy office decided against the confessor, provided the penitent expressed willingness to submit to the judgment of the church. But no formal decision on such cases followed, and in 1838 a general notice was issued to confessors no longer to importune penitents on account of being in receipt of interest. For all practical purposes the doctrine, while it remains intact, has ceased to exist.

[Boeckh's *Public Economy of Athens*.—Grote's *History of Greece*.—Mommsen's *History of Rome*, 2 vols., London, 1868, 1875.—W. A. Hunter's *Roman Law*, London, 1885. As to the prohibition of interest by the canon law, and its peculiar influence in the development of the LAW MERCHANT, see Endemann, *Handbuch des Handelsrechts*, i. pp. 13-14, 19-20.—Goldschmidt, *Universal geschichte des Handelsrechts*, pp. 137-172. For the scholastic doctrine, Endemann's *Studien*. For the revolt against scholasticism, Child's *New Discourse of Trade* (1690).—Locke's *Essay on Civil Government*.—Hume's *Essay on Interest*.—Turgot's *Les Prêts d'Argent*.—Bentham's *Defence of Usury*, Works, vol. iii. Edinburgh, 1843. For the new socialist doctrine, Rodbertus, *Sozialökonomische Ansichten*, Jena, 1882.—Böhm-Bawerk on *Capital and Interest* (translated by Smart), London, 1890. On the rate of interest, see J. S. Mill's *Political*

Economy, bk. iv. ch. iv.—Professor Foxwell in *Journal of Institute of Bankers*, vii. (1886).—Von Wieser, *National Value*, edited by W. Smart, 1892.—Distinction from discount, Supino, *Saggio de lo Sconto* (1892). All books on the general principles of political economy treat of the subject.] I. S. L.

INTERLOPERS were persons who, not being members of the companies chartered by the crown, nor having a license from them, traded on their own account to the countries to which the companies had the sole trade. Throughout their existence, the companies suffered much from the competition of these outsiders. The relations between them therefore have an important bearing on economic development, particularly on the growth of free trade. It would be impossible here to give a full account of those relations during the latter half of the 16th and 17th century. But a few instances from the history of the trading companies, and a summary of the arguments for and against the claims of the outsiders, will show the nature of the questions at issue. In 1604, the "free traders" nearly succeeded in breaking up the monopoly of the companies, especially the Merchant Adventurers and the Russia Company. Two bills directed mainly against these associations—(1) "for all merchants to have free liberty of trade into all countries"; (2) "for enlargement of trade for his majesty's subjects into foreign countries," passed the Commons "with great consent and applause of the House (as being for the exceeding benefit of all the land), scarce forty voices dissenting," but they were rejected by the Lords. Complaints of the monopoly of the Merchant Adventurers were again made to the House of Commons by the merchants and clothiers of Exeter and other parts of the west of England in 1638, 1643, and 1645. The ordinance of 1643, regulating the company, appears to have been a concession to the outsiders, and under the Commonwealth and Protectorate there appears to have been a movement of opinion in their favour. A committee for trade, appointed by the common council of London, reported to the council for trade in 1651, that they found the Staplers "unnecessary and disadvantageous," and the discussions in the council in 1656 show strong opposition to the claims of the Merchant Adventurers. Interlopers were a source of difficulty to the Russia Company throughout its career, and important concessions were made to them in 1654. Similar difficulties were experienced by the Levant or TURKEY Company (q.v.), the EASTLAND Company, and the EAST INDIA Company. The history of the last-mentioned company supplies several important cases. In 1604, James I. granted to Sir Edward Michelborne and his associates a license "to discover the countries of Cathaia, China, Japan, Corea, and Cambaia, and the

islands and countries thereto adjoining, and to trade with the people there, notwithstanding any grant or charter to the contrary." Michelborne greatly injured the East India Company, but in 1607 they decided to drop their suit against him in the Admiralty. In 1637, Charles I. granted a license to Sir William Courten and others, to trade to Goa, Malabar, and China; his association, or the Assada Merchants, as they were called, competed with the East India Company for many years. In 1650-51, on the recommendation of the council of state, a union was effected between the company, the Assada Merchants, and a third body, the Merchant Adventurers, trading to the Indies, which became the basis of a united joint stock. But three years later, the last two petitioned the council of state for an open trade. The interlopers achieved a temporary success, and for three years the company, the Assada Merchants, and the Merchant Adventurers, as well as numerous private traders, competed with each other, with the result that the East India trade was completely disorganised, and Cromwell was forced to renew the charter of the company. The leading case on the claims of the companies against the interlopers is *The East India Company v. Sandys* (1684). It was argued at great length before Lord Chief Justice Jefferies, Holloway and Walcot, by Holt (afterwards lord chief justice), Finch (afterwards Earl of Nottingham), and Sawyer, for the plaintiff; and Treby (afterwards lord chief justice), Pollexfen (afterwards lord chief justice), and Williams for the defendant. Judgment was given for the plaintiff, and Sandys' ship and goods were confiscated.

It will now be convenient to summarise the arguments for and against the interlopers. There were two distinct questions at issue: 1. Did the creation of such companies as have been noticed fall within the limits of the royal prerogative? 2. Could they, under cover of their charters, pretend to an exclusive trade? On the first, opinion was by no means unanimous, some people contending that parliament alone could impose the restrictions on trade which the very existence of a company involved. Additional force was given to this argument, when the companies made the royal grant the pretext for excluding all others from the trade. The outsiders answered the second question in the negative. It was contended that the king could create corporations for carrying on a trade, but he could not restrain others from exercising that trade; such restraint was restraint of a common right; it appropriated to one or a few what others might lawfully use before the grant was made. A charter conferring such exclusive privileges was therefore void. The East India Company, which was a joint-stock company, came, it was said, within the provisos of the statute of monopolies,

at any rate, after the expiration of their first charter, though the same objection could not perhaps be urged against the regulated companies. Many statutes were quoted in defence of the claim for free trade; on more general grounds it was held that the right to trade was "a right, natural and human," and a charter against natural and civil right was void. On the other hand, a distinction was drawn between inland and foreign trade, and it was maintained that by common law subjects had no absolute right to pursue the latter, which presupposed treaties or leagues of amity concluded by the king of England with foreign powers; that no statute had ever given a general liberty of trade to Englishmen to or with all nations, and that the special statutes dealing with particular nations or particular commodities were not declaratory, but introduced a new law. The distinction between joint stock and regulated companies was held to be of no weight, because it did not touch the question of right, whether a company could or could not have a grant of an exclusive trade. On the ground of expediency, the case for the companies against the interlopers was strong. The men to whom the first charters had been granted were frequently the first discoverers of the trade, and it seemed only fair that they should enjoy a monopoly to reimburse them for their outlay. Their position was analogous to that of the patentee of a new invention, whose claim to a monopoly for a limited period was universally conceded. The companies also were put to great expense for the maintenance of official establishments and factories, for negotiating treaties, for costly presents, and for other objects. It was unfair that interlopers should step in and reap the fruits of their enterprise, without undertaking any of their arduous and expensive duties. They would naturally be able to undersell the companies in the home markets, and the trade would ultimately be destroyed. It was also maintained that experience was in favour of the company organisation, for the trade could not be carried on successfully by any other means. To those arguments the interlopers had an effective reply. Considerations of expediency did not effect the right to an exclusive trade, and it was that which they called in question. To urge expediency in defence of the companies was to set up convenience, or the pretence of convenience, against law; and such an argument might be as effectively used against the companies as in their favour. It might, for example, be urged by the Assada Merchants, as a reason for suppressing the East India Company. There was no objection to the grant of a monopoly for fourteen years to the first discoverers of a trade, but it should then determine. Besides, most of the trades monopolised by the

companies had been carried on by private traders, or associations of private traders, before the grant of exclusive charters. Those who claimed liberty of trade were willing to bear their full proportion of necessary charges, nor did they wish to dissolve any company. On the contrary, a joint stock was, as a rule, necessary for distant trades. They merely claimed that people should be free to form companies or not, as the conditions of the trade should determine, and that no one company should enjoy a monopoly (see COMPANIES).

W. A. S. H.

INTERNAL CUSTOMS AND TOLLS. It has sometimes been asserted of taxes that they supply nations with more causes of grief than of well-being. Whether this sweeping assertion is generally true or not, it is certainly confirmed by experience in respect to internal tolls and customs. France, the earliest unified of western continental powers, affords us a striking example of their mischievous operation, which may serve as an illustration of the inconvenience and injury they cause to the trade of a country.

As appears by one of their names, *droit de haut passage*, French customs are, during the feudal ages, difficult to separate from tolls proper. From 1360 they were called *imposition* or *traite foraine*, and as the provinces had preserved their own special constitutions, several of them, such as Picardy, Artois, Anjou, Poitou, Berry, Auvergne, Languedoc, etc., successively adopted them, the duties being collected by a body of officials called *masters of the ports*, but with various tariffs and under different names—*tablier* at La Rochelle, *prévôté* in Nantes, *comptable et convoi* in Bordeaux, *coûtume de Bayonne*, *trépas de la Loire*, *traite foraine* in Anjou, etc. The most vexatious of these customs were those of Lyons and Valence (formerly of Vienne), which commanded the passage of the Rhône, and through which *all* goods, whether foreign or home-made, on their way to or from southern France, were compulsorily and unmercifully obliged to pass. The former amounted to 5 per cent, the latter to 3 per cent, and Forbonnais mentions four cases in which it had to be paid twice; not including the tolls levied by private individuals, he reckons that thirteen different duties were exacted between Lyons and Arles, a distance of 150 miles (*Recherches sur les Finances de la France*, i. pp. 358, 359). The same author quotes the bitter complaints made against the customs of Valence by a deputy of Lyons at the states of Dauphiné in 1600: "These customs are a rock and a cause of shipwreck. They are hatched and grow like crocodiles. . . . The terrified merchants fly from this passage as if it were a cut-throat place (*un coupe-gorge*) . . . and if caught, only recover their liberty when the officers have rummaged their bales to the bottom and their purses also" (*Recherches*, i. pp. 40, 41). The eloquence of the worthy

member for Lyons was lost, for these customs continued until 1790.

On the Loire, where Forbonnais enumerates 28 tolls, the oppression was quite as vexatious, and Louis XIV., under the direction of Colbert, uses in the preamble of the edict of 1664 language quite as strong as had been heard sixty years before in the states of Dauphiné. "We have ascertained," are the royal words, "that under different names such a diversity of these [duties and tolls] have been set up that we have been filled with astonishment at the institution of so many levies and impositions, sufficient to disgust our subjects from continuing their trade. . . . The merchants cannot possibly have a sufficient knowledge of them, still less their factors and carriers, who are constrained to rely on the good faith of the managing clerks, often doubtful" (P. Clément, Colbert's *Letters and Instructions*, vol. ii. pt. ii. pp. 787-796).

In this edict, Colbert endeavoured to alleviate and unify the chaotic system bequeathed by past ages, but the *Pays d'États*, who in contrast with the *Pays d'Élection* enjoyed the privilege of voting and assessing their taxes, steadfastly resisted; the minister was obliged to submit, and France had to be divided into three regions.

1st. Twelve provinces, mostly round Paris and between the Somme and the Loire, in which the internal customs were abolished; they were called *les cinq Grosses Fermes* on account of the system of farming their taxes (see FARMING OF TAXES).

2nd. The so-called *provinces étrangères* (Britanny, Auvergne, southern France, the Franche Comté, and Flanders), which maintained their interior lines of customs.

3rd. The provinces *traitées comme pays étranger* (considered as foreign) Alsace, Lorraine, Toul, Metz, Verdun, and the seaports Marseilles, Dunkirk, Bayonne, and Lorient, which enjoyed the envied privileges of being free ports.

The enlightened views of Colbert thus only became law in the central parts of the kingdom; everywhere else he met with a stubborn resistance prompted by a perhaps justified fear of royal encroachments, by local jealousies, and also by surviving notions on the means of securing plenty, which had been dominant in the middle ages.

The system of tolls proper (*tonlieux* and *peages*) on travellers and goods by land or by water covered with an inextricable net the whole of the kingdom. Imposed by force and under the penalty of confiscation by nobles (*rouage* or *rotaticum*, *cantlage* and *carragium* on carts, *pulverage* on flocks of sheep, *portage* or *pontaticum* on bridges, *rivage* or *ripaticum* and *mutaticum* on barges and their cargoes, etc.), and by townships (*carragium*, *portage*, and *barrage*), they were an object of unceasing complaint. Several ordinances of Louis IX., Charles VII., Louis XI. and Francis I. attempted to put limits to these

extortionate demands: new *péages* were prohibited and it was decreed that the existing ones must be sanctioned by deed or immemorial possession. An ordinance of 1561 ordered that the nobles who levied tolls were to keep the roads in repair, and another of 1663 declared that tolls might only be collected under authority of the king. The *Assemblée de Commerce*, summoned in 1700 by Louis XIV., petitioned for the suppression under compensation of all private tolls, and about 1200 were suppressed in 1724, but thousands of them still survived on the eve of the French revolution. "A barge laden with wine from Languedoc, sailing up the Rhône and proceeding to Paris by canals and the Loire, has to pay from thirty-five to forty various duties and tolls, exclusive of the tolls on the Rhône and the entry in Paris, in fifteen or sixteen different places . . . which makes the journey a fortnight longer than if all were paid at once in one same bureau" (from MS. in the *Archives Nationales* quoted by Taine—*Ancien Régime*, p. 471). In his *Finances de l'Ancien Régime* (i. 473), M. Stourm relates the history of a Paris commissary of police sent on an official mission to buy wine in the south, and convey it in person to Paris, so as to ascertain experimentally what were the fiscal incidents of the journey. From Roanne to Melun, about 240 miles, he had to pay 16 *péages seigneuriaux*, 7 octrois, without reimbursement on leaving the place, and the customs duty according to the tariff of the *Cinq Grosses Fermes* already mentioned. The honest commissary in despair did not proceed farther than Melun. Well might Necker exclaim in his *Administration des Finances*: "These laws are so confused that scarcely one man or two out of each generation succeeds in mastering them completely" (p. 473). He introduced a bill for the abolition of internal tolls and customs before the *Assemblée des Notables* in 1787, but this reform was only voted in 1790 by the national assembly considering that "these divers duties had made the different parts of the state foreign to each other."

From that day, the restoration of internal customs has never been attempted in France, although what might be called municipal customs still exist under the name of *OCTROI (q.v.)*. As to the roads, the revolutionary government first tried a system of voluntary *corvées* inspired "by the generous fire which animates our free and republican souls," but as this generous fire turned out to be totally wanting, the directory, in 1797, set up turnpikes (*barrières*) on the highways: the tariff for a four-wheeled cart with two horses amounted to 80 centimes (8d.) and to 1·20 fr. (say 1s.) for spring-carriages, per 15 miles. But this imitation of the English turnpikes was not successful, and in 1806 the then minister of finance, GAUDIN (*q.v.*), had to give it up and to confess that "it excited frequent brawls,

constant complaints, and that it only yielded 16,000,000 of francs, against an expenditure varying from 30,000,000 to 35,000,000" (*Notice sur les Finances*). Thus, in France at least, practical experience contradicts Adam Smith's opinions that carriages and lighters might "easily" pay for "the maintenance of public works exactly in proportion to the wear and tear which they occasion of them" (*Wealth of Nations*, bk. v. pt. iii. ch. i.). Moreover, on the roads, the expense of the collections of the turnpike dues absorbed 23 per cent of the proceeds. On rivers and canals, although it was an easier task to collect them at the sluices, where barges and lighters are necessarily detained, navigation is also free since 1880; the levying of tolls by companies or corporations who have executed public works, is quite exceptional, and must in each case be conceded by a special law. The prevailing feeling looks on the construction and repairing of roads and canals as a public service, which ought to be covered by the public revenue; however, for the latter, there were in 1889 some unavailing attempts to cause the French parliament to reconsider the question. A tax of 10 per cent on travellers' fares in public vehicles has existed since 1797; similar taxes are laid on fares and freight by rail, but these receipts have no specific allocation to the repair of roads and are included in the total revenue of the state.

Germany has, naturally owing to its state of political division, been one of the countries where the system of internal customs and tolls has received the most excessive extension. Vainly did successive diets declare that such unauthorised tolls had no legal existence; the petty princes and sovereigns persisted, and at length succeeded in obtaining the legal recognition of their prerogatives. Sometimes the different provinces of one particular state were fenced round with tolls, for instance in Prussia, where the Great Elector Frederick William (1620-1688) having introduced a system of excise varying from province to province, compensatory excise-duties (*Ergänzungsaccise*) had to be paid on the passage from one province into another. After the peace of 1815, Prussia initiated the movement of reform of German internal customs, which culminated in the conclusion of the ZOLLVEREIN (*q.v.*) and of internal tolls on the transport of goods and travellers. On the Oder about thirty provincial tolls were suppressed, numerous communal and private tolls were redeemed, and on canals the dues were henceforward calculated on the capacity of the barges and lighters, without having any longer regard to the nature of their cargoes. The same policy of simplification was from 1838 applied to roads and highways; still down to 1867 such dues as *Pflaster-, Brücken-, Damm-, Fahr-gelder* (pavement, bridge, dyke, pass

age tolls) were levied, besides the *Chausséegeld*, which was only abolished in 1874. (Article *Binnenzölle* in Conrad's *Handwörterbuch der Staatswissenschaften*, Jena, 1889-1890). In southern Germany their suppression had taken place earlier: Bavaria and Württemberg, 1828, Baden, 1831. [See OCTROI, vol. iii. and App.]

[For Germany, see Hüllmann, *Deutsche Finanzgesch. des Mittelalters*, 1805.—Falke, *Gesch. des deutschen Zollwesens*, 1869; and Roscher, *Gesch. der Nat. Oek.*, p. 950. For France, besides the already-mentioned works, the articles "Douanes," "Droits," "Péages," in the *Encyclopédie Méthodique*.—Renauldon, *Traité historique et pratique des droits seigneuriaux* (Paris, 1765).—Moreau de Beaumont, *Mémoires sur les Impositions de la France* (1785).—Clanagaran, *Histoire de l'Impôt en France* (1867-76).—Vignon, *Études historiques sur l'Administration des Voies Publiques en France avant 1790* (Paris, 1862), and the articles "Canaux de Navigation," "Douane," "Péage," "Routes et Chemins," and "Voies de Communication" in Guillaumin's (old) *Dictionnaire d'Economie Politique*.] E. ca.

INTERNAL REVENUE TAXES IN THE UNITED STATES. In the United States this term is applied to federal taxes imposed upon domestic manufactures, trade, or income. It does not include revenue derived from sales of public lands, postal revenues, or patent fees. Internal revenue duties have been imposed at three different periods: 1791-1802; 1813-1817; and 1862 until the present time (1893). During the first period taxes were levied upon distilled spirits (1791), carriages, licenses for retailing wines and liquors, snuff, refining sugar, auction sales (1794), stamped papers (1797), and a direct tax of \$2,000,000 (£400,000) (1798). The first of these duties was very unpopular in certain sections of the country, not only on account of the special burdens which were imposed upon farmers, who were the distillers of the period, but also because it was regarded as a British tax, hostile to American freedom. Opposition gave rise to the whisky rebellion in the western part of Pennsylvania. The republican party under the leadership of Jefferson was pledged to the repeal of the existing internal revenue duties; and with their succeeding to power, this was done in 1802. The necessities of war revived these taxes in the second period, and a similar reason occasioned their imposition at the beginning of the civil war. In the last period they were weeping in their embrace; and, owing to the urgency of the times and general ignorance of the incidence of such taxes, there was frequent change and no system. The first of these measures was the act of July 1, 1862, which imposed specific and *ad valorem* duties upon manufactures, licenses upon occupations, a general income tax, and a tax upon gross receipts of transportation companies. The system was further extended by the act of June 30, 1864; and it was estimated by Mr. David

A. Wells that between eight and fifteen per cent of the value of the finished product was collected by the treasury department. So productive indeed were these taxes that from 1864 until 1868 they exceeded the customs revenues. With the close of the war many of the internal revenue duties were reduced or repealed, until taxes were imposed only upon the manufacture and selling of distilled liquors, fermented liquors, tobacco and cigars, and oleomargarine.

During the first period, 1792-1801, the internal revenue duties varied from 5 to 9 per cent of the net ordinary receipts; in the second period, they constituted about 13 per cent; and since 1862 they have been one of the principal props of financial support, furnishing in recent years about 40 per cent of the net receipts. As the country has become accustomed to the taxes, and they are favourably regarded by many as desirable sumptuary regulations, they may remain for the present (see FINANCES, UNITED STATES).

[For the early period see H. C. Adams, "Taxation in the U.S. 1789-1816," in *Johns Hopkins Studies*, vol. ii.; and for the period of the civil war, *Reports of the Special Commissioner of Revenue* (D. A. Wells) for the years 1866-68; also annual *Reports of the Commissioner of Internal Revenue* (published without Tables in the *Finance Reports*.)] D. R. D.

INTERNATIONAL. See INTERNATIONAL WORKING MEN'S ASSOCIATION.

INTERNATIONAL COINAGE. The idea of having one and the same measure of values for all civilised nations received a strong impetus from the great exhibition in London of 1851. The difficulty then experienced in comparing the prices of similar exhibits from different countries and the values of the exhibits of one country as against those of another, led to the discussion of the possibility of establishing an international standard; the question came up at various meetings of the international statistical congress. In December 1865 France, Belgium, Italy, and Switzerland made the convention by which the currency of the Latin Union was established. In 1867 the conference at the Paris exhibition invited wider consideration of the idea thus adopted. Two delegates from Great Britain attended this conference, which recommended that a uniform gold standard be adopted by civilised countries with coins of $\frac{2}{3}$ fineness; and that the gold coins thereafter struck by countries the parties to the convention should be multiples of five francs. About the same time several countries had been making some move in the direction of assimilating their coinage to that of their neighbours.

The royal commission of 1868, which arose out of the Paris conference, marks for Great Britain the most important epoch in the history of the idea. That commission examined some of the leading economic thinkers of the day,

such as Bagehot, Jevons, and Newmarch, of whom the latter was almost alone in being very lukewarm about the matter; the principle of an international coinage was warmly espoused by several witnesses. The commission summed up the evidence as tending to show—

1. That time would be saved to all traders in calculations and comparing foreign price-lists.

2. That small traders would be relieved from a disadvantage which at present they suffered in their inability to keep a staff conversant with foreign price-lists, etc.

3. That commercial travellers would be much aided in pushing their wares.

But the commission very rightly pointed out that these advantages, even if not exaggerated, would only be obtained by complete uniformity of weights and measures as well as coins. As regards coins it stated the absolute necessity of some sort of international mints so as to assure each country that the international coins did correspond in intrinsic value with their denomination; it pointed out the necessity of a uniform charge for mintage; and after discussing the various possibilities as to the choice of a coin for a common standard, concluded that a measure which would cause so much disturbance of existing contracts, and was after all only a partial measure, could not be lightly entered into; and they reported distinctly against any suggestion that Great Britain should merely adopt a gold coin of the value of 25 francs instead of the sovereign.

Here the matter rested so far as Great Britain was concerned for thirteen years. But the conference of 1867 is thought to have borne fruit in the adoption of a gold standard by Germany in 1871, and the alteration of other national currencies. When in 1882 delegates on behalf of the British Indian and imperial governments attended another conference at Paris upon the question, the idea had taken a new turn; in 1867 the general opinion of the parties who met in conference had favoured a single gold standard; now the United States, as well as some other countries, had declared for a double standard. The possibility of agreement on an international currency was farther off than ever.

The system generally supported by advocates of change as the best to be adopted is a decimal system (see DECIMAL SYSTEM), and to some extent the movement in favour of an international measure of value became mixed up with the movement in favour of international weights and measures. Even if the principle of the decimal system be admitted, we have still to face the difficulty of electing between the two chief decimal systems of the world—those of the United States and of the Latin Union. And there is at least a question whether the mere theoretic convenience of the decimal system

should weigh against other considerations, e.g. that of keeping in currency the most generally known coin of the world. The Commission of 1868 on that ground suggested that the sovereign was best adapted for an international standard—but they did not consider whether it should be redivided on a decimal system; this is of course a matter of pure convention.

The general objections to a change which falls with different weight on different countries are chiefly (1) the necessity of revising all contracts; (2) the expense attendant on re-coinage. They will be found well stated in the late Mr. Newmarch's evidence before the commission of 1868. We are assuming that subsidiary coins will follow the standard, and that thus one class of difficulties will disappear.

There is, however, one important point touched on by Mr. Goschen in his evidence before the same commission—viz. whether making a "coin" a universal measure will not be to substitute a token for the commodity known as gold.

The idea of an international coinage is not impossible, though at present impracticable. In the 15th and 16th centuries the Spanish dollar and Portuguese Johannes became for all practical purposes international coins, and at the present time the English sovereign comes almost as near to that ideal as the Spanish dollar did.

[The publications of the International Association for obtaining a uniform decimal system, etc., especially a *Concise Narrative* by Leone Levi, 1867.—The report of the Royal Commission of 1868 in *P. P.* of 1868, vol. xxvii.—The reports of the delegates to the International Monetary Conference 1882 in *P. P.* of 1882, vol. liii.]

C. A. H.

INTERNATIONAL LAW.

I. INTRODUCTION, p. 441. II. THE LAWS OF PEACE, p. 442; 1. Independence, p. 442; 2. Property, p. 442; 3. Jurisdiction, p. 442; 4. Equality, p. 443; 5. Diplomacy, p. 443. III. THE LAWS OF WAR, p. 443; 1. Preliminary Points, p. 443; 2. Enemy Persons, p. 444; 3. Enemy Property on Land, p. 444; 4. Enemy Property at Sea, p. 444; 5. Agents and Instruments of Warfare, p. 444. IV. THE LAW OF NEUTRALITY, p. 444; 1. The Nature of Neutrality, p. 444; 2. Rights and Obligations as between Belligerent and Neutral States, p. 445; 3. Ordinary Maritime Capture, p. 445; 4. Contraband Trade, p. 445; 5. Blockade, p. 445; 6. Unneutral Service, p. 446.

I. INTRODUCTION.—International Law may be defined as the *rules which determine the conduct of the general body of civilised states in their dealings with one another*. Some writers regard it as deduced from principles of natural justice implanted by the Creator in the human breast (Vattel, Wheaton, Hautefeuille), while others look upon it as a body of precepts drawn from the practice of states, and resting for their validity upon express or tacit consent (Hall, Stephen). The latter view is in accord with the facts of history. Modern international law is derived from usage, some of it extending back to remote antiquity, but most being the

growth of the last three centuries. Rules have been adopted partly because they were convenient and partly because they were deemed just and merciful. The law of nations is ultimately shaped by the public opinion of the civilised world.

II. THE LAWS OF PEACE. 1. *Independence.*—

Every fully sovereign state possesses the right of managing all its affairs without interference from other states. This is called the right of independence. It is conditioned by an obligation to respect the corresponding rights of other members of the family of nations. Mutual intercourse is as impossible among states without mutual concession as it is among individuals. Political communities, like Egypt and Bulgaria, which are not allowed entire freedom of action in external affairs, cannot be regarded as fully sovereign and independent; but a state which submits temporarily to restrictions imposed by treaty is not held to have forfeited thereby its title to independence. Intervention takes place when a state interferes by force or threat of force in the internal affairs of another state, or in questions arising between two or more states. Such action trenches upon independence, and is therefore to be looked upon with grave suspicion. Each case must be judged on its own merits. Publicists differ widely as to what are lawful grounds of intervention. It is best to restrict intervention to cases where the duty of self-preservation overrides the obligation of respecting a neighbour's freedom of action. Undoubtedly a state may intervene to ward off a direct and pressing danger to its own safety or its highest national interests.

2. *Property.*—Modern international law assumes that sovereignty is territorial (Maine, *Ancient Law*, ch. iv.). States possess arsenals, museums, hospitals, munitions of war and similar objects; but their territorial possessions are by far the more important. Their dominion extends not only over the land within their boundaries and all the rivers and lakes enclosed therein, but also over the sea to the distance of three miles from low-water mark along their shores, and over the narrow bays and gulfs indenting their coast. The best rule with regard to inlets is that, if the line drawn from headland to headland across the entrance is less than ten miles in length, they are territorial waters, if more, they are a part of the open sea. In the former case the marine league is measured from the imaginary line across the opening, in the latter from the shore around the bay. The ten-mile rule has not, however, been adopted universally in practice, like the three-mile limit. The open ocean is free from territorial dominion. Its use is common to all, and none have exclusive rights within it. The old claims to dominion over large portions of it have become obsolete, the last relic of them having disappeared when the arbitrators of Paris decided, in 1893, against

the claim of the United States to exercise jurisdiction in Behring Sea for the purpose of preventing vessels of other nations from catching seals therein. There is a right of innocent passage through natural territorial waters when the channel connecting two portions of the high seas runs through them. All vessels at peace with the territorial power possess it; and it has been secured as regards the artificial channel of the Suez Canal by the convention of 1888, which neutralised that water-way. Fisheries in territorial waters are reserved for subjects of the local sovereign; fisheries in the high seas are open to all. But these simple rules are often modified by treaty stipulations. If a river flows through more countries than one, it is now the custom for them to grant reciprocal rights of navigation. If a river flows between two countries, the territory of each extends to an imaginary line drawn along the middle channel (*Thalweg*).

3. *Jurisdiction.*—Jurisdiction is in the main territorial; but states have a personal jurisdiction over their own subjects wherever they may be, though it cannot be enforced if the territorial jurisdiction of any other power conflicts with it. Each state exercises authority over all persons and things within its territory, with some few exceptions. Questions of jurisdiction assume an international aspect when two states put forth conflicting claims with regard to the same individual. Thus a person born in one country and naturalised in another, may be regarded by each as its citizen; and, if he returns to the country of his birth, it may possibly deal with him in a way that causes the country of his naturalisation to interfere for his protection. England in 1870 recognised the naturalisation of her subjects abroad as depriving them of their British citizenship; and, with regard to her naturalised subjects, she protects them abroad except in the country of their birth, but there she will not interfere on their behalf unless by its law they have ceased to be its subjects. This rule avoids all trouble; but countries which, like the United States, claim to protect their naturalised subjects wherever they may be, meet with constant difficulties in the matter of compulsory military service. Latterly these have been avoided by treaty stipulations whereby the obligation is not to be enforced unless the person concerned had actually come under it before he left his native land. Citizens of one country domiciled in another must pay all state and local dues, but they cannot be compelled to serve in the army. Real property is for all purposes under the local law; but if personal property is situated in one country and its owner is domiciled in another, the *lex domicilii* (see *DOMICIL*) prevails with regard to it. A state's jurisdiction extends to all ships, except foreign men-of-war, in its territorial waters, to

all its own ships on the high seas, and to all pirates seized by its vessels. Some states follow France in declining to exercise authority over foreign merchantmen in their ports, when only the interior order and discipline of the ship are concerned. In such cases the law of the country to which the ship belongs is applied. Foreign sovereigns visiting a country in an official capacity, and the resident diplomatic agents of foreign powers, are exceptions to the rule that a state's jurisdiction extends to all persons and things within its territory. Their persons and property are inviolable. They are exempt from ordinary legal processes, and even in cases of grave misbehaviour all that can be done is to escort them out of the country. Land forces of foreign states may not enter the territory without permission; but when in it they are under the authority of their own officers. Foreign ships of war enter friendly ports without special permission. While there they are exempt from the local jurisdiction in most matters, but are bound to observe port and health regulations, and also neutrality regulations should their country be a belligerent. They may give asylum in extreme cases to political refugees and fugitive slaves, but not to ordinary criminals. The local authorities have no right to effect arrests on board. Western states have obtained by treaty for their subjects in oriental countries under native rule exemption from the local jurisdiction, and subjection instead to consular courts of their own nationality or mixed tribunals. Most civilised powers are now bound by extradition treaties to surrender to one another criminals, who, having committed a grave offence in the territory of one state, succeed in escaping to another. Political offenders are usually excepted from these stipulations.

4. *Equality*.—The doctrine of equality means that the rights and obligations of each independent state are the same, not that all are equal in influence. Since outward forms are the signs of equality or the reverse, the rules of etiquette between states are treated of under this head. Some of them regulate precedence at court ceremonials, others are concerned with diplomatic rank and the order of the signatures to international documents, while a third class deal with salutes by foreign war-vessels visiting a port and salutes between vessels at sea.

5. *Diplomacy*.—Diplomatic intercourse is now carried on by means of agents accredited by each state to its neighbours, and permanently resident at their capitals. These agents are divided into four classes: (1) ambassadors, and papal legates or nuncios; (2) envoys and ministers plenipotentiary accredited to sovereigns; (3) ministers resident accredited to sovereigns; (4) *chargés d'affaires* accredited to ministers of foreign affairs. The classes rank in the order given; but within each class precedence is determined by length of residence at

the court to which its members are accredited. A state may refuse to receive a given individual as the diplomatic agent of another state if he is one of its own subjects, or personally obnoxious to its sovereign, or openly hostile to it or its institutions; and it may ask for the recall of a diplomatic agent, and even dismiss him, if in its opinion he has seriously misconducted himself. Such rejections are consistent with friendliness between the powers concerned, but a refusal to continue diplomatic intercourse at all is a sign of rupture and generally the prelude of war. Diplomatic ministers possess large immunities. In all matters governed by the *lex domicilii* their residence abroad is held to be a residence in their own country. Their persons are inviolable. They are free from legal processes. Their official residence may not be entered, except in extreme cases, by the local authorities, nor may their papers be seized. The members of their suite who are in the diplomatic service are free in most matters from the local jurisdiction; and their wives and children, and even their servants, share their immunities to a considerable, though not very precisely determined, degree.

III. THE LAWS OF WAR. 1. *Preliminary Points*.—War is a contest carried on by public force between states, or between states and communities having, with regard to the contest, the rights of states. Private wars have been abolished in civilised countries. All wars are now public, in that they are carried on by governmental authority. There are various ways of obtaining redress by force, which are held to fall short of war, though they differ from it only in the intention of the parties. They are reprisals, EMBARGO (*q.v.*), and pacific blockade (see BLOCKADE). The first involves the destruction or seizure by one state of property belonging to another in the territory of the latter or on the high seas. The second is used when the aggrieved state seizes all the ships of the offending nation found in its ports. The third is like an ordinary blockade except that the ships of third powers cannot be captured. No formal DECLARATION OF WAR is necessary. The moment war begins the public armed forces on both sides are free to act, private individuals are obliged to refrain from pacific intercourse with enemy subjects, and some treaties with the enemy are abrogated, while others, such as extradition treaties, are suspended. When a province or colony revolts from the mother-country, other powers may without offence accord it recognition of belligerency, if it carries on war in civilised fashion, possesses a regular government and a fairly well-defined territory, and if the interests of the recognising state demand that it should fix the *status* of the revolted community. Such recognition grants all the rights and obligations conferred on lawful belligerents.

2. *Enemy Persons.*—Enemy subjects found within a state's territory at the outbreak of war are allowed to remain on condition that they live quietly and peacefully and give no information or assistance to their own state. A right to expel them exists; but it is rarely used, the action of the French government of national defence in expelling Germans from the department of the Seine in 1870, being the only instance in modern times. The population of the enemy's country is divided into combatants and non-combatants. With regard to the former, quarter is given when asked for, prisoners are cared for, and, if possible, exchanged, the sick and wounded are well treated and the practice of slaughtering the defenders of a fortress taken by assault has died out. With regard to the latter, they are to be protected from personal insult and injury; but, when they reside in territory in the enemy's occupation, they may be compelled to perform for him any service not distinctly military, and must give no aid or information to their own side. Women and children are sometimes allowed to leave places about to be bombarded.

3. *Enemy Property on Land.*—Real property situated in the state and possessed by enemy subjects is not confiscated or sequestered, nor is personal property unless the proper authorities order seizure. The outbreak of war renders such property confiscable, but does not *ipso facto* confiscate it. Debts due from subjects of one belligerent to subjects of the other cannot be collected during the war, but the right to demand them revives at the conclusion of peace. Debts due from a belligerent state to subjects of the enemy are not confiscable. Movables taken in war on land are called "booty." They should be sold and the proceeds divided among all concerned according to a regular plan. If booty is recaptured before the captors have held it for twenty-four hours, or before they have brought it within their lines, it reverts to the original owners. When an invader holds a portion of his enemy's country in firm possession, he is said to occupy it. In that case he may use immovables belonging to the invaded state, and, though he may not alienate them, he may appropriate the rents and profits derived from them, unless they are devoted to the support of religion, charity, or education. State movables may be appropriated and alienated, except legal documents, state papers, works of art, and scientific instruments. Neither private immovables nor the profits arising from them may be confiscated, but military necessity justifies their destruction. Private movables are unconfiscable unless of immediate use in war. Requisitions may be levied on occupied districts, which are thereby compelled to furnish articles needed for the daily consumption of the invaders. The taxes are paid into their military chest, and sometimes further sums are

exactd under the name of contributions (see ENEMY GOODS).

4. *Enemy Property at Sea.*—Maritime capture can be carried on in the territorial waters of either belligerent and on the high seas. Private as well as public property may be captured; but vessels exclusively engaged in works of exploration, discovery, or humanity, vessels engaged in coast fisheries, and vessels driven by stress of weather into their adversary's ports, are usually exempt from seizure. Moreover, in recent wars merchant vessels of one belligerent found in the ports of the other at the outbreak of war have been allowed a reasonable time to depart, and cargoes of works of art have been restored to enemy owners. And further, enemy goods not contraband laden on board neutral vessels are free from capture under the Declaration of Paris of 1856 (see article on that subject). With the exceptions just given, enemy ships, and enemy goods on enemy ships, are good prize. Belligerent cruisers have a right to stop and overhaul all merchantmen on the high seas in order to discover whether they are liable to capture. Prize Courts are established by belligerents to try the validity of captures made by their cruisers; and it is the duty of captors to bring every prize in for adjudication. But extreme necessity is held to justify the destruction at sea of vessels taken from the enemy. If captured property is recaptured, it is restored under certain conditions to its original owners. Great Britain restores if the recapture is made during the same war.

5. *Agents and Instruments of Warfare.*—Regular soldiers and sailors are legitimate combatants; but guerilla troops and levies *en masse* are held lawful only when they can be easily distinguished from non-combatants and respect the laws of war in their operations. Savage or half-civilised troops, regularly embodied and drilled, and led by civilised officers, are employed by many states. Privateers are forbidden by the Declaration of Paris; but the question of the legality of a volunteer navy, raised by Germany in 1870, has not been definitely settled. The crews of merchant ships may not fight except to resist an attack upon their own vessel. Assassination, the poisoning of food and water, and the use of poisoned weapons and of explosive bullets below 14 oz. in weight, are forbidden. Devastation of an enemy's territory is deemed lawful only when justified by overwhelming military necessity. Stratagems which involve breaches of faith are condemned.

IV. THE LAW OF NEUTRALITY. 1. *The Nature of Neutrality.*—Neutrality is the condition of those states which in time of war take no part in the contest, but continue pacific intercourse with the belligerents. Neutral governments must give no assistance to either belligerent and preserve perfect impartiality

between them. Neutralised states are those which, like Belgium and Switzerland, are obliged, as a condition of having their national existence respected and defended by other states, to abstain from warfare except in the strictest self-defence. Provinces have been neutralised, and also persons and things, such as those concerned with the care of the sick and wounded, which have been protected by the Geneva Convention of 1864. The Suez Canal was neutralised by a great international treaty in 1888.

2. *Rights and Obligations as between Belligerent and Neutral States.*—A belligerent state may not carry on hostilities within neutral territory, or use it as a base of operations, or recruit in it, or obtain supplies of arms or warlike stores for its cruisers in neutral ports and waters. Its vessels must obey reasonable regulations made by any neutral as to the length of their stay in its ports, the admission or exclusion of their prizes, and the amount of coal they may take in. If its troops are driven across a neutral frontier they must submit to being disarmed and interned. A neutral state is bound not to give armed assistance to either belligerent, nor to permit belligerent troops to march through its territory, nor to sell ships or arms to belligerents, nor to lend money to either of them, nor to allow them, or its own subjects for them, to levy troops, or fit out armed expeditions within its dominions or increase the armament or fighting crew of any vessel of war in its waters. It must restrain its subjects from engaging in the military service of belligerents within its territory or accepting letters of marque from them; and it lies under a vaguely-defined obligation to prevent the original departure from its territory of vessels built and fitted out therein for the naval service of either belligerent. The Geneva arbitration of 1872 has not cleared up this point.

3. *Ordinary Maritime Capture.*—The old rule that governed cases of maritime capture uncomplicated by special circumstances of character, destination or control, was that enemies' goods were prize, even if found on neutral ships, and neutral goods were not prize, even if found on board enemies' ships. Attempts began in the 17th century to substitute for it the rule that enemies' goods in neutral ships were not prize, and with this was joined the rule that neutral goods on enemies' ships were prize. The Declaration of Paris adopted the portion of the opposing rules most favourable to neutrals, and decreed that enemies' goods, except contraband of war, should be free under the neutral flag; and neutral goods, with the same exception, should be free under the enemies' flag (see DECLARATION OF PARIS). Neutral goods on board a belligerent cruiser are liable to capture, and they would probably be

adjudged good prize if found on an armed enemy merchantman. Resistance by neutral merchantmen to belligerent search renders both ship and cargo good prize. In the absence of special agreement neutrals cannot avoid belligerent search by sending their merchantmen to sea under the convoy of their ships of war. Neutral vessels under belligerent convoy are good prize.

4. *Contraband Trade.*—Belligerents have a right of capturing on the way to the enemy such goods as are directly necessary to the conduct of his hostilities, even though they are carried in neutral vessels. The goods are called "contraband of war" (see CONTRABAND); and the offence of the neutral consists not in selling them, but in carrying them. A belligerent destination is essential; and if a merely colourable neutral destination is interposed between the port of departure and the real termination of the voyage, the doctrine of continuous voyages applies, and the goods are condemned as contraband. Articles useful primarily and ordinarily for warlike purposes, such as arms and ammunition, and the machinery for making them, are always contraband. Articles useful primarily and ordinarily for peaceful purposes, such as books, music and furniture, are never contraband. With regard to articles useful for warlike and peaceful purposes indifferently, technically termed articles *ancipitis usus*, such as clothing, food and coal, there is great difference of opinion. British and American courts and jurists favour the doctrine of occasional contraband, which makes them good prize or not according to such circumstances as the nature of the port to which they are going, the special character of the goods themselves, and the special needs of the enemy. Continental opinion inclines strongly to a restriction of the list of contraband goods, and as a rule rejects the doctrine of occasional contraband, though in 1884 France endeavoured to regard food (rice) as contraband in the course of her operations against China. The British doctrine is strongly based in reason and authority, but there can be no doubt that our courts and statesmen have sometimes given it an undue extension. The usual penalty for carrying contraband is confiscation of the contraband goods, but the whole cargo is confiscated if the proportion of contraband goods to innocent goods is large, and both belong to the same owner. The vessel also is confiscated if it is owned by the owner of the contraband goods, or if any fraudulent device, such as showing false papers, is used to avoid capture.

5. *Blockade.*—Belligerents have the right to capture neutral merchant vessels attempting to enter or leave the enemy's ports, if they are able to maintain a ship of war or a squadron in such a position that any attempt at ingress or egress is eminently dangerous. But they cannot

obtain this right by merely proclaiming a port or a coast-line blockaded, and supporting the proclamation by no force at all or by an entirely inadequate one. Such attempts are called paper blockades. When the Declaration of Paris asserted that a blockade to be binding must be effective, it did but declare an undoubted principle of international law. Military or strategic blockades are those which are carried on with a view to the ultimate reduction of the place blockaded. Commercial blockades are those carried on with the object of weakening the enemy by cutting off his external trade. They are certainly lawful; but there is a growing feeling against them caused by the fact that with modern facilities of land communication they will in most cases cripple neutral trade without inflicting serious injury upon the belligerent subjected to them. When a state establishes a blockade, it generally sends a diplomatic notification thereof to neutral governments. The British school of publicists hold this to be equivalent to notification to neutral ship-masters, but the French school require a warning to be given direct to the neutral ship-master on his first approach to the blockaded port. Thus notification has little or no effect in French practice; whereas English prize law varies considerably according to its presence or absence. The doctrine of continuous voyages applies to BLOCKADE (*q.v.*) as well as to CONTRABAND (*q.v.*). The offence of breach of blockade attaches the moment the blockade-runner leaves its own waters, and is not deposited till the end of the return voyage. The usual penalty is confiscation of ship and cargo; but, if they belong to different persons and the owner of the cargo did not know that the port of destination was blockaded, the ship alone is confiscated.

6. *Unneutral Service.*—Neutral individuals are forbidden to perform certain services for a belligerent, such as transmitting signals or messages for warlike purposes, carrying military or naval despatches, or carrying persons in the military, naval or civil service of the belligerent government. These are not matters of contraband trade. They amount to entering the service of the belligerent, though to a limited degree and for a temporary purpose. It is sometimes difficult to draw the line between what is allowed and what is forbidden in these matters. For instance it has been decided that to carry men returning from abroad to perform military duties in a belligerent army was not unneutral service, because the men were unarmed and unorganised and travelled as ordinary passengers, though cases of arms were in the hold of the vessel which took them. But it has also been decided that to carry shipwrecked officers and men of a belligerent navy home to their own country was unneutral service, because they were organised and the vessel was specially

hired by their government to transport them. The two important tests are the knowledge of the master of the vessel, and the character of the contract he enters into. If he knows that he is signalling or carrying persons useful in war for a belligerent, and especially if in addition he has made a special contract with an agent of the belligerent government, he will not, if captured, escape the penalty of the confiscation of his ship. Usages are growing up in favour of the exemption of duly certified and sealed mailbags from belligerent search; but at present they have not crystallised into law. Exemption has been granted in recent wars as a matter of comity.

[Acollas, *Droit de la Guerre*.—Bar, *Private International Law*, Gillespie's translation.—Bernard, *Neutrality of Great Britain during the American Civil War*.—Calvo, *Droit International*.—Cushing, *Treaty of Washington*.—De Martens, *Guide Diplomatique*.—Foelix, *Traité du Droit International Privé*.—Hall, *International Law*.—Halleck, *International Law*, Baker's ed.—Hautefeuille, *Des Droits et des Devoirs des Nations Neutres*, vol. i.—Heffter, *Droit International*, pp. 269 *et seq.*.—Lawrence, *International Law*.—Maine, *International Law*.—Manning, *Law of Nations*, bk. iv. chs. vii. and viii.—Nys, *Guerre Maritime*, ch. iii.—Ortolan, *Diplomatie de la Mer*.—Piggott, *Exterritoriality*.—Phillimore, *Commentaries*.—Story, *Conflict of Laws*.—Twiss, *Law of Nations*.—Wharton, *Conflict of Laws*.—Wheaton, *International Law*, Dana's ed. pt. ii.]

See works of Hall, Manning, Maine, Ortolan, Halleck, Phillimore, Calvo, Heffter, Hautefeuille, Nys, and others cited in this article. Bluntschli, *Droit International Codifié*.—Wharton, *Digest of the International Law of the United States*.—Kent, *Commentaries*.—Woolsey, *International Law*.—Creasy, *First Platform of International Law*.—Fiore, *Nouveau Droit International Publicque*.—Pommeroy, *International Law in time of peace*.—Hertslet, *Map of Europe by Treaty*; publications *Institut de Droit International*; ANGARIE, *DROIT D'*; AUBAINE, *DROIT D'*. HAGUE CONFERENCES; INTERNATIONAL LAW, App.] T. J. L.

INTERNATIONAL LAW, PRIVATE.

I. Introduction, p. 446; II. Domicile and Nationality, p. 447; III. Capacity, p. 447; IV. Minors and Lunatics, p. 447; V. Marriage and Divorce, p. 447; VI. Property and Wills, p. 447; VII. Contracts and Torts, p. 448; VIII. Limitation of Actions, p. 448; IX. Bankruptcy, p. 448; X. Foreign Judgments, p. 448; XI. Procedure, p. 449; XII. The Method of Amendment, p. 449.

I. INTRODUCTION.—Many more or less complex cases are brought before courts of law, so connected with different countries that it becomes a question of what country the law ought to be applied to them. The department of law which answers that question is called private international law, or the CONFLICT OF LAWS (*q.v.*). Its basis is sometimes said to be international comity, as if it was only through comity that a court ever applies a foreign law. But this is not so. Suppose, for example, that the heirship to an estate in England depends on the validity of a marriage which took place

in Scotland. The English court is impelled by much more than comity to apply Scotch law, and not English, to the question whether that marriage could be valid without the presence of a clergyman or a registrar. The selection of a law is itself matter of legal principle, which ought to lead to the same selection being made in all countries. And to a great extent that result is attained, but in many cases the selection is so difficult that neither all countries, nor all judges and authors in the same country, are agreed on it. The subject is eminently one which lies *inter apices juris*. As may be seen from the example just given, the questions dealt with in it arise not only between independent states, as France and Italy, but also between different parts of the same state possessing distinct systems of law, as England and Scotland. And the principles, and the solutions to which they lead, are the same for both cases, so far as circumstances permit.

II. DOMICILE AND NATIONALITY.—Domicile and political nationality occur so frequently among the circumstances determining the selection of a law that the careful examination of those two characteristics, with a view to the classification of persons by them, is considered to be a branch of private international law. Domicile is divided into that of origin and that of choice (see DOMICIL). Without going into all the distinctions necessary in practice, the former is the domicile which a person derives at his birth, usually from his father, and the latter is that which a person of full age establishes for himself by fixing his residence within a certain jurisdiction, with a sufficient character of permanence. There is on the continent of Europe a wide and growing tendency to substitute political nationality, as a determining element in the selection of a law where a person is concerned, for domicile, which is the older criterion. English judges have not followed that movement, and, even where it prevails, no test but domicile can be applied to distinguish persons who, within the same independent state, belong to parts possessing distinct systems of law, as Englishmen from Scotchmen, Austrians from Hungarians, or men of New York from Pennsylvanians. The law which belongs to a person, and the jurisdiction to which he is subject, either on the ground of his domicile or on that of his nationality, are called his personal law and jurisdiction. That term, for the purposes of the English courts, means the law or jurisdiction of the domicile, even although the person in question is of British nationality, but has a non-British domicile. In certain other countries—France, for instance,—the personal law or jurisdiction is taken to be that of the nationality, subject to the necessity of using domicile in order to distinguish persons of, say, British nationality into Englishmen, Scotchmen, South Africans, or others.

III. CAPACITY.—This may be absolute or relative. The question whether a person is of the age required by law to make a will, marry, or conclude any other contract, is one of absolute capacity; that of whether two persons are incapable of marrying one another on the ground of consanguinity or affinity is one of relative capacity. Both kinds of capacity have usually

been referred on the continent of Europe to the personal law, and in England also the capacity to make a will has always been referred to the law of the testator's domicile. But in England formerly the capacity, whether absolute or relative, for marriage or any other contract, was referred to the law of the place where it was entered into, the *lex loci contractus celebrati*; and so it still is in the United States. Now, however, Lord Westbury, Lord Justice Cotton, and Lord Halsbury, have pronounced that capacity depends entirely on the law of the domicile.

IV. MINORS AND LUNATICS.—The guardians and curators, whether of the person or of the estate, appointed for a minor or a lunatic by the jurisdiction which claims him on the ground either of his nationality or his domicile, can exercise their functions in England, both as to his person and as to his movable property. But the English court also has jurisdiction, and can appoint guardians or committees, though it will only do so in aid of the foreign jurisdiction, so long as the appointees of the latter are not abusing their powers.

V. MARRIAGE AND DIVORCE.—The validity of a marriage, as regards the form of its celebration, like that of any other contract, is universally held to be governed by the law of the place of celebration. We have seen the rules as to the capacity of the parties.¹ Divorce has been granted in England when the husband, whether petitioner or respondent, is resident here, though his residence may not amount to domicile; but the English court shows a strong tendency not to recognise the divorce of persons domiciled in England, when decreed by a foreign court on the ground of mere residence, and since the decision in *Le Mesurier v. Le Mesurier*, June 1895, it is probable that in future it will only be granted in England to persons domiciled here. The place where a marriage was contracted is immaterial in a suit for divorce, and the grounds for decreeing divorce can only be those which are admitted by the law of the country in which the court sits, the *lex fori*.

VI. PROPERTY AND WILLS.—Property is divided into movable and immovable, terms which are equivalent to our personal and real estate, except that terms of years in land are immovable property though personal estate in England. This line of demarcation between movables and immovables is recognised for the purposes of private international law even in England.

A distinction must be drawn between questions affecting a particular piece of property, movable or immovable, and those affecting the entirety of a person's property, or of the movable part of it, on the occasion of his marriage or death. The former class of questions, as, for instance, the form and effect of a conveyance of land, or the

¹ One consequence of those rules is that a man domiciled in England gains nothing by going through the form of marriage with his deceased wife's sister, even in a European country where such marriages are allowed to its own subjects. The relative capacity being generally tested in Europe by the personal law, it will not be a marriage even where the form is gone through, unless the parties have previously naturalised themselves there, or transferred their domicile to that country, which would be incompatible with the intention of returning to live in England.

conditions necessary for passing the property in a lot of deal planks, are decided by the law of the country where the piece of property is, the *lex situs*. As to the latter class of questions, the oldest rule, still maintained in England, determined the rights which husband and wife take in one another's movables on marriage by the law of their domicile, which is necessarily that of the husband, and determined the beneficial succession to the movables of a testator or intestate by the law of his last domicile, but left similar questions for immovables to the *lex situs*. Now, however, there is a growing tendency on the continent to consider that the whole mass of a person's property, immovable as well as movable, ought to be dealt with on his marriage or death as a unit, in accordance with his personal law.

What has been said as to the beneficial succession to movables on death being governed by the law of the deceased's last domicile (or nationality) applies, as a general rule, to distribution on intestacy and to the validity of wills in matters of substance, such as the proportion of his property of which a testator can dispose, or the extent to which he may tie up his property. The formal validity of a will, as with respect to the number of witnesses, or to its being notarial or holograph, has usually been referred on the continent, in common with the forms of contracts and acts in general, to the law of the place where it is made, the *lex loci actus*. But the old English practice required that a will of movables should be made also in the form of the domicile, so that both in this case and in that of contracts it took the peculiar line of determining both formal and substantial validity by the same law, though with this difference, that in contracts the rule for the capacity was taken from that for the form, the law of the place of contract, while in wills the rule for the form was taken from that for the substance, the law of the domicile. But now, by Lord Kingsdown's act, a will of personal estate will be held in the United Kingdom to have been well made if it follows the form either of the testator's last domicile, or of the country in which he was domiciled when it was made; or, if he was a British subject, that of the place where it was made; or, if such British subject made it out of the United Kingdom, the form required in that part of the British dominions in which he had his domicile of origin.

VII. CONTRACTS AND TORTS.—The validity of a contract in point of form is determined by the law of the place where it was made, except that foreign stamps are not required in England on bills of exchange. In other contracts it is agreed that foreign stamps, which are necessary to their validity where made, cannot be dispensed with; but that principle is frittered away in England by a doctrine that a contract may be valid although, for want of a stamp, no available obligation arises from it.

The intrinsic validity and the effects of a contract are determined by the law of that country with which the contract has the most real connection, especially by the law of the country to which the parties looked as that in which it was to be fulfilled.

In order that an act may be sued on in England as a TORT, it must be a tortious one both by the law of the country where it was done and by English law.

VIII. LIMITATION OF ACTIONS.—No part of private international law presents more difference of doctrine between authors, or more difference of practice between different countries, and between different periods in the same country, than this. In England it is settled that the time of limitation is always the English one, and within that time actions are entertained on contracts or tortious acts, though barred by the law of the country to which the contract properly belonged or where the act was done, and after that time are not entertained, though the obligation from the contract or tort is in full vigour in that country.

IX. BANKRUPTCY.—There has always been a considerable body of opinion in favour of bringing all the assets and all the liabilities of a bankrupt into one focus at his domicile, but this has been resisted not only, as in the somewhat parallel cases of marriage and death, by the theoretical objection to comprising immovable assets in the principle, but also by the practical convenience which is often found in having concurrent bankruptcies in the different countries where the debtor has carried on business, instead of sending all the creditors to his domicile, from which they may be very remote. In England every one is subject to be adjudicated bankrupt who is domiciled here, or within the last year has ordinarily resided or had a dwelling-house or place of business here; that he has been made bankrupt elsewhere does not prevent his being adjudicated one here, if it seems expedient to the court that this should be done; the syndics, or other administrators appointed in a bankruptcy in the debtor's domicile, can sweep his movable property in England within their administration, so long as there is no concurrent bankruptcy against him here; an English creditor must hand over to the trustees in an English bankruptcy any payment which, after its commencement, and not by virtue of any security given prior to its commencement, he has obtained out of the bankrupt's movables in a non-British country; and a discharge under the bankrupt law of a foreign country will only relieve the debtor, in England, from contracts governed as to their effects by the law of the same country, and from torts committed in it.

X. FOREIGN JUDGMENTS.—A foreign judgment, for a sum of money, can be sued on in England when the court which pronounced it was competent by reason of the defendant's being either a subject of that country by nationality, or domiciled in it, or resident in it in a sense looser than that which is needed for domicile but such as is generally sufficient for jurisdiction. All these are grounds of competence having reference to the defendant's person, and are admitted as such everywhere. Where the competence of the foreign court was founded on the circumstance that the obligation sued on had special reference to that country, there is no equally general acceptance of definite rules for jurisdiction, and the English court will not now admit an action on the foreign judgment. In any case where the competence of the foreign

court is admitted and the action entertained, the foreign judgment will be allowed the force of *res judicata*, that is to say, the defendant will not be allowed to dispute it, for alleged error either of fact or of law. The courts of many countries entertain actions not resting on any of the grounds of competence above mentioned. In France, for instance, a Frenchman can sue, although both the defendant and the obligation may have no connection with France. But the judgments in such actions will not be enforced in any other country than that in which they are pronounced. The grounds above mentioned are the only ones of what may be called international competence.

XI. PROCEDURE.—This is always governed by the *lex fori*; that is to say, every court follows its own procedure, and no other, whether in rules of evidence or in any other particular.

XII. THE METHOD OF AMENDMENT.—We must warn the reader that our limits have only allowed us to present a selection of important points, and to treat them especially with reference to the rules prevailing in England, and in a very general way even with reference to those rules. We hope, however, that enough has been said to show how desirable it is that the subject should be settled on a uniform basis for all countries, and how hopeless it is that such a result should be attained except by international agreement. Doctrinal discussion has been at work for seven centuries, with no further result than we have seen. Governments have therefore been at last impelled to take up the subject, and in September 1893 the delegates of fourteen countries met at the Hague, on the invitation of the Netherlands, in a conference on the codification of private international law. In June 1894 the conference reassembled, the delegates of sixteen countries taking part, and a portion of the work, amounting to fifty-nine articles, has been drafted and submitted to the respective governments. It is much to be regretted that the British government declined the invitation to the conference (see CONFLICT OF LAWS).

[The following are a few of the principal works. England: Westlake, *Private International Law*, 3rd ed., 1890.—Foote, *Foreign and Domestic Law*, 2nd ed., 1890.—Dicey, *Law of Domicil*, 1879.—United States: Wharton, *Conflict of Laws*, 2nd ed., 1881.—Story, *Conflict of Laws*, often re-edited: *Continent of Europe*: von Bar, translated from German into English, by Gillespie, 2nd ed., 1892.—Laine, 1888.—Asser, translated from Dutch into French by Rivier, 1884.—*Revue de Droit International et de Législation Comparée*, Brussels, from 1869.—*Journal du Droit International Privé et de la Jurisprudence Comparée*, Paris, from 1874.] J. W.

INTERNATIONAL SECURITIES. A certain number of stocks and shares are dealt in indiscriminately: on the London market, on the Paris bourse, on the exchanges of Germany or Austria, on those of Holland, and even in New York. The ability of holders to realise in any of these markets, or in that one out of several which may happen to be the best for his purpose, puts such stocks into a different category from those which depend upon a single local and

limited market. To give instances, the bonds of the French or Italian governments are dealt in freely on most of the European exchanges, and of Italian bonds it might be said that the best market is almost anywhere outside Italy. The *locale* of market for specific government bonds changes from time to time. Thus, since Russia grew, or was thought to have grown inimical to England, Russian bonds were gradually realised here and sent to Germany or Holland or France; and, whereas Germany was the chief market for Russian securities, after London had lost taste for Russian stocks, France afterwards stepped in and by degrees relieved German holders of a large portion of the Russian sterling bonds which had been bought in Berlin, Frankfurt, and on other stock markets of Germany. The shares and bonds of the South Austrian Railway Company (formerly Lombardo-Venetian) were at one time a favourite medium of remittance between markets, these being realisable not only in Vienna, but just as freely in Berlin or Paris or London. Of late years certain American railroad shares have taken the rank and distinctive features of international securities, and bankers have been heard to declare that they would rather advance money upon American railroad shares which carried no dividend, and which might be thought intrinsically valueless, but which could be realised in almost any great market of the world at a pinch, than lock up money in British Colonial stocks for which the market was confined to London, and was not always a free market even on the London stock exchange. A large part of the remittances between countries is now conducted by means of the purchase and sale by *arbitrage* dealers of these international securities. Nothing can be more prompt than the execution of an order by telegraph to buy or sell in Paris securities which were sold or bought against those operations in London, for example. These arbitrage dealings have a strong influence on the exchanges. Thus, suppose money is scarce in London and plentiful in Paris, the scarcity here naturally induces holders of French or other bonds to realise. The pressure to sell in this market reduces the price in London below the equivalent on the Paris bourse. Instantly the arbitrage dealer sees his opportunity, buys here—in the cheaper market, that is—and sells in Paris, which is contemporaneously the dearer market. The French exchange on London thereupon tends to rise, and cash drifts hither if the operations described are sufficiently large and numerous (see ARBITRAGE).

A. E.
INTERNATIONAL TRADE. A term used to describe commercial dealings between different countries, as opposed to those taking place within a single country or region. The separation between foreign and domestic trade, due originally to the importance attributed to the former in the MERCANTILE SYSTEM (*q.v.*), has been re-

tained on scientific grounds. There is not such facility for moving labour and capital from country to country as would equalise wages and profits, while the effect of cost of carriage and other obstacles to exchange is very prominent. The ordinary theory of exchange therefore failing to completely interpret the facts, a special explanation is needed, the outlines of which are:—

The difficulty of moving labour and capital is regarded as the cause of the peculiar features of foreign trade. "A nation in the economic sense is a group of producers within which labour and capital freely circulate" (Bagehot), while they do not easily pass outside it. This relative immobility, sometimes regarded (*e.g.* by J. S. Mill) as the result of distance solely, seems more correctly conceived by Cairnes as the product of all the forces—"viz. geographical distance, differences in institutions, language, religion, and social customs"—which separate the economic groups called "nations." As labour and capital cannot move freely from country to country, normal international values will not depend on cost of production, the existence of industrial competition being requisite for the full operation of that regulator. Nevertheless exchanges between countries will be advantageous owing to (1) diversities in natural resources, and (2) the existence of special industrial aptitudes, the result of social development. Though cost will not determine value, it will not be without effect on the course of trade. "The existence of international trade" depends on "a difference in the comparative as contradistinguished from the absolute cost of producing the commodities exchanged" (Cairnes). If, *e.g.*, England gives France coal in exchange for wine, the cost of producing coal as compared with wine must be less in the former than in the latter country.

It is conceivable that both coal and wine may be more cheaply produced in France, but the advantage being greater in the case of wine, it is profitable to obtain coal by means of exchange; thus a difference in *comparative* cost of producing commodities will suffice to create a trade in them, unless (*a*) the hindrances to exchange be such as to absorb the gain, or (*b*) other countries offer more favourable terms. Cost of production, *so far as it is operative within the trading countries* (see COMPETITION AND CUSTOM) acts as a limiting force on foreign trade. Within the bounds set by comparative cost exchanges are mainly governed by the strength of reciprocal demand (see INTERNATIONAL VALUE).

The benefit of international as of all exchange lies in the increased enjoyments of the exchangers and therefore in the goods received, *i.e.* the only direct advantage of foreign commerce consists in the imports (Mill). Exports are merely the price or consideration paid for what is obtained by these means, a proposition which follows from and illustrates Adam Smith's maxim, "Consumption is the sole end and pur-

pose of all production . . . a maxim so perfectly self-evident that it would be absurd to attempt to prove it."

The general gain of foreign trade can be further divided into, (1) the obtaining of articles which could not be produced at home; (2) the cheapening of goods which could be so produced but at greater cost; (3) the more efficient distribution of industrial forces and consequent larger production by the extension of "the territorial division of labour" (Torrens), the last chiefly found in the case of manufactures.

Possible evil results should in theoretical discussion be noted, viz. (1) specialisation of industry, of which foreign trade is but one form, increases the chance of so-called over- (really *mis-*) production. It is more difficult to gauge the amount of product required in a widely extended market; and such disturbances as wars and failure of crops may produce serious effects. (2) The extension of international exchange may intensify the action of the "law of diminishing returns." In the case of a food-exporting country increased foreign trade is equivalent to an increase of population. When the product is an exhaustible one (*e.g.* English coal or Peruvian guano), the evil is more apparent (*cp.* Jevons, *Coal Question*, pp. 370 *seq.*). See MINES AND MINERALS, EXHAUSTION OF.

In interpreting the facts of international trade, valuable assistance is afforded by the proposition that "gold and silver having been chosen for the general medium of circulation, they are by the competition of commerce distributed in such proportions amongst the different countries of the world as to accommodate themselves to the natural traffic which would take place if no such metals existed and the trade between countries were purely a trade of barter" (Ricardo). Its truth is shown by considering that any other distribution would be unstable, as either export or import of bullion would be necessary; it is in fact a special case of the general law that relative prices must be adjusted to relative values.

Until this proposition was formulated "the theory of foreign trade was," as Mill justly remarks, "an unintelligible chaos." By its aid the problems of international trade and values are freed from a complicating element. The precious metals can be regarded as simply an instrument for facilitating exchanges; normal values are not altered by their fluctuations (see MONEY), which only affect *prices*. Monetary changes, like any other trade disturbance, may be followed by temporary movements, which however do not invalidate the general principles.

The actual working of international trade is carried on by means of the FOREIGN EXCHANGES, (*q.v.*) supplemented by telegraphic facilities and the modern developments of BANKING (*q.v.*), but as in the case of money these agencies alter no essential feature. The fundamental conditions

of exchange hold good alike under a "barter," "money," or "credit economy."

The above outlined theory furnishes a logical basis for the practical rule of FREE TRADE (*q.v.*). "To those who accept the economic theory of international trade, no further proof of the essential soundness of this fundamental principle of commercial policy is needed" (Cairnes, *cp. Cherbuliez*, t. 2, p. 55), though particular theoretical exceptions may be suggested (*cp. Mill, Principles*, bk. v. ch. 10, § 1; Sidgwick, bk. iii. ch. 5). It may also be usefully employed in discussing the effect of taxation on imports and exports (*cp. Mill, Essays and Principles*, bk. v. ch. 4, § 6).

The theory of international trade first stated by Ricardo, more elaborately developed by Mill and Cairnes, may be regarded as the recognised English doctrine, though there are some dissentients (*e.g.* Mr. M'Leod), and even those who do not reject the theory, sometimes, with Prof. Sidgwick, minimise its importance. On the continent it has not met with much acceptance, being either ignored or controverted. The principal objections may be grouped as: (1) international does not differ from domestic trade, and therefore needs no special explanation; (2) the assumptions made are incorrect, so that the conclusions do not interpret the facts (*COURNOT, q.v.*); (3) though logically correct, they have no application to the complications of actual trade (*Lexis*). Some continental writers have however given admirable expositions, especially A. E. Cherbuliez.

[Ricardo, *Principles of Political Economy and Taxation* (1817), ch. vii.—Torrens, *Economists refuted* (1808); *ib. External Corn Trade*, 1st ed. (1815).—J. S. Mill, *Essays on some Unsettled Questions of Pol. Econ.*, pp. 1-46 (1844); *Principles*, bk. iii. ch. 17-22 inclusive.—Cairnes, *Leading Principles*, pt. iii. (1874).—A. E. Cherbuliez, *Précis de la Science Economique* (Paris, 1862) t. i. pp. 335-391.—Mangoldt, *Grundriss* (2nd ed. 1871) pp. 97 *seq.* 203 *seq.*—Most English text-books contain statements of the theory (*e.g.* Fawcett, Walker, MacVane, Andrews).—See also Bastable, *Theory of International Trade* (1887).—Beaujon, *Handel en Handelspolitiek* (Harlem, 1888).—For criticism, see A. Cournot, *Théorie des Richesses* (1863), livre iii. ch. 6.—Lexis, art. "Handel" in Schönberg's *Handbuch der Politischen Oekonomie* (2nd Au.) bk. ii. pp. 753-758. Also references under INTERNATIONAL VALUE, THEORY OF.] C. F. B.

INTERNATIONAL VALUE, THEORY OF.

The problem of international value, as distinct from that of international trade, deals with the question, "On what principle is the increase of wealth which results" from foreign trade "shared amongst the nations which co-operate in producing it?" Or, since the division of gain depends on the ratio of exchange, "What causes determine the proportions in which trading nations exchange their products" (Cairnes). Its solution depends on an application of the fundamental principle of supply and demand.

Under INTERNATIONAL TRADE (*q.v.*), it appeared that the terms of exchange must lie between limits fixed by the relative costs of producing the exchanged goods in the trading countries. Thus if the production of 10 yards of cotton yarn or of silk requires a given cost in France, while 20 yards of cotton-yarn can be produced in England at the cost of 10 yards of silk, the exchange of English cotton-yarn for French silk may be profitably carried on at any ratio between 10 yards silk: 10 yards cotton-yarn, and 10 yards silk: 20 yards cotton-yarn. Less than the former France will not take, more than the latter England will not give. Within these bounds the rate of exchange will depend primarily on the comparative strength of demand. Should the English demand for silk be keen, while that of France for cotton-yarn is feeble, the terms of exchange will probably approach to 10 yards silk for 20 yards cotton-yarn, the precise ratio being so fixed as to equalise the reciprocal demand for the exchanged commodities: *e.g.* if, at the ratio 10 yards silk: 19 yards cotton-yarn, England takes just 100,000 yards silk and France 190,000 yards cotton, the "equation of international demand" (J. S. Mill) will be attained, and so long as the conditions are unchanged the ratio will be stable. An increased demand on the part of either country will tend to alter the terms to its disadvantage—suppose that France needs more than 190,000 yards of cotton she will have to offer say 10 yards silk for 18 yards cotton, and the amounts exchanged may be 110,000 yards silk for 198,000 yards cotton-yarn, which will again equalise reciprocal demand.

In the simple case supposed the equation of demand is not determinate; "several different rates . . . may all equally fulfil the conditions. . . . It is conceivable that they might be equally satisfied by every numerical rate which could be supposed" (J. S. Mill). This theoretical indeterminateness may be removed by taking into account for each country "the capital which it has to spare from the production of domestic commodities for its own consumption" (Mill), or by remembering that as the demand on each side is that of a whole country, it will not be likely—as Cairnes points out (*Leading Principles*, 1st ed. p. 103) in the similar case of reciprocal demand between non-competing groups—to be easily altered.

Hindrances to exchange, such as cost of carriage, unnoticed in the preceding remarks, reduce its advantage and cause a divergence of values in the trading countries. In the absence of impediments, values must be the same in both, but cost of transport and all similar items will raise the value of each commodity in the importing country, so that, *e.g.*, silk will be dearer in England and cotton-yarn in France. The division of this charge will depend on the readjustment of demand which the change in values will

probably produce, and, as there is no precise law for the variations of demand, any change in the amount of hindrances to exchange, will be likely to alter the terms already established, and therefore the proportion of gain derived; "but no absolute rule can be laid down for the division of the cost any more than for the division of the advantage, and it does not follow that in whatever ratio the one is divided the other will be divided in the same" (Mill).

In practice countries will generally trade not in *two* but in many commodities. "Those articles in which the difference in comparative cost is greatest will first enter into international commerce;" but as obstacles to traffic are reduced additional commodities will be exchanged—"a movement which tends to extend until no goods remain whose transfer would give an advantage to either of the parties" (Mangoldt). The extension of trade makes value more stable, and tends to bring about a fairer division of gain, e.g. the French demand for cotton-yarn may be feeble while that of England for silk is strong, but the addition of iron and coal to English exports will act on the total French demand and improve the position of England.

Commerce moreover is not limited to two nations. Most staples are produced in more than one country, and are traded in by many. The consequence is a further limitation on the possible fluctuations of value. To the small French demand for cotton a German one may be added, and the advantage of France in the exchange of silk may be reduced by the competition of Italy as a producer of that article. Commodities the subjects of foreign commerce have their values fixed in the market of the world, local deviations being the result of particular hindrances to trade. International values lie "in the region of the most complicated questions which political economy affords" (Mill), and can only be elucidated by use of the principle that "trade among any number of countries, and in any number of commodities, must take place on the same essential principles as trade between two countries and in two commodities" (*ib.*) (cp. Jevons, *Theory*, 2nd ed. p. 124).

International prices have to be carefully distinguished from international values. Prices tend to adjust themselves to values (see INTERNATIONAL TRADE) by the alterations in distribution of the precious metals. Price—the value of money—is a special case of the value problem. The precious metals have their international value fixed by the same conditions as those obtaining in the case of other commodities. "The countries whose exportable productions are most in demand abroad and contain greatest value in smallest bulk, which are nearest to the mines, and which have least demand for foreign productions, are those in which money will be of lowest value" (Mill), this lower value

being the result of increased quantity. The theory of international value due in its main features to J. S. Mill has been severely criticised by Cournot and in England by Prof. Sidgwick, who regards "the division of the double cost of carriage which trade involves between the two sets of commodities" as "the question which a special theory of international values has to answer." On the continent it has been neglected by most text-book writers. According to M. Block, "*Les économistes du continent ont bien fait de laisser 'la théorie de la valeur internationale' de l'autre côté de la Manche*" (*Science Économique*, ii. p. 172). Cherbuliez, Mangoldt, and Beaujon are, however, exceptions. The prevailing view in England and the United States may perhaps be summed up in Jevons's judgment of Mill's theory as being "always ingenious and . . . nearly always true" (*Theory*, 154).

[See references under INTERNATIONAL TRADE. Special for international value are J. S. Mill, bk. iii. ch. 18-19.—Cairnes, *Leading Principles*, pt. iii. ch. 3.—Sidgwick, bk. ii. ch. 3.—F. Y. Edgeworth, "The Theory of International Values," in *Economic Journal*, vol. iv.—Mangoldt, *Grundriss, Anmerkung*, ii.—Beaujon, *Hoofdstuk*, 3.—Bastable, ch. 3. See also Torrens, *The Budget* (1842), and criticism in *Edinburgh Review*, July 1843 (by Senior).] C. F. B.

INTERNATIONAL WORKING MEN'S ASSOCIATION, THE. This association, which came to be generally known by the abbreviated title of "The International," was founded in 1864. Its origin was very different from its ultimate development. It was suggested by some representatives of English working men in an address presented to some French workmen who had come over on the instance of the Third Napoleon to visit the London exhibition of 1862. It was suggested as a means of interchange of thought and opinion on the solution of the labour problem, among other economic questions affecting the welfare and condition of society. It was suggested as a means of creating an union of interest and feeling between the working men of different countries. It had apparently in its origin no definitely socialistic aims, it even held that the socialist schemes, which had been professedly put forward as solutions of the labour problem, were idle chimeras and magnificent dreams. But, as soon as the suggestion took practical shape, the committee which was formed requested Karl MARX (*q.v.*), the author of *Das Kapital*, to draw up the programme and to prepare the statutes of the association. He impressed upon it from the outset the stamp of his own socialistic views; and, although throughout its history he never held any higher office than that of corresponding secretary for Germany, he seems to have exercised a predominant influence over its deliberations and acts. The statutes,

which were adopted at the congress held at Geneva in 1866, declared, in the characteristic language of modern scientific SOCIALISM (*q.v.*) that the "economic subjection of the labourer to the possessor of the means of production is the first cause of his political, moral, and material servitude, and that the emancipation of labour is consequently the great aim to which every political movement ought to be subordinated." This phrase of the "emancipation of labour" was conveniently ambiguous, and was interpreted differently by the working-men members of different countries. The English trade-unionists saw in it far less than the Russian nihilist BAKOUNIN (*q.v.*), who merged his more violent "Alliance of Socialist Democracy" in the larger organisation of the International; but for some years a working basis of agreement was found by cherishing a distant ideal of a revolutionary nature at the same time as immediate practical aims of so comparatively moderate a character as free education, gratuitous justice, and a normal working day of eight hours, were sought to be accomplished. The association held periodical congresses in various towns, and gained a footing in different countries. In Belgium it had as many as eight federations of associations, and several journals; in Holland it possessed a branch in almost every town in 1869, and in Spain its organisation extended throughout the length and breadth of the country and comprised a membership of more than 300,000. It did not spread in Norway or Sweden, nor yet in Switzerland, although its congresses were not unfrequently held in the last-mentioned country. It exercised, M. de Laveleye observes, little real influence in Germany or in England, but in the latter country it obtained the nominal adhesion of 30,000 trades-unionists represented at the Trades Union Congress of 1867. From the first there were discordant elements in the association, and after the revolution of the COMMUNE OF PARIS, which followed the Franco-German war, and met with the approval of the leaders of the International, the English members dropped off. At the first congress, which was subsequently held, at the Hague in 1872, the association broke up into two rival factions on the questions of the nature of the political constitution of the society of the future, and of the means by which that new society was to be substituted for the present régime. The centralist democratic socialists, led by Marx, were in favour of centralised authority, the anarchic socialists, led by Bakounin (see NIHILISM), disliked central government and favoured the old communal system. The former advocated legal and peaceful organisation, and a gradual though inevitable evolution from the old order to the new; the latter urged revolution. Bakounin was expelled from the association; and for a time two

separate organisations maintained a lingering existence and then died away. The connection of the English trades unions with the International had never been very close, although the first president was Odger, a noted unionist leader, and the first secretary, Cremer, another unionist leader of repute. There can indeed be little doubt that generally the International possessed far less power in reality than that with which it was commonly credited. But it certainly inspired wide-spread alarm. It was joined for a short time by the Italian Mazzini. It was suspected of being the real author of the Paris Commune. It has been the subject of a parallel between itself as the Red and the Roman Catholic church as the Black International. Its first manifesto concluded with the words "Proletarians of all countries, unite," and from its outset it aroused the repressive hostility of the governments of France, Italy, Austria, and Spain.

[J. Rae's *Contemporary Socialism*, chs. ii. and iv.—De Laveleye's *Le Socialisme Contemporain*, ch. x.—Hyndman's *Historical Basis of Socialism in England*, ch. xii.—Labour Comm., *Foreign Reports on Germany*, should be consulted. See also *Le Devenir Social*, June 1895. *En mémoire du manifeste du parti Communiste*, by A. Labriola.]

L. L. P.

INTERPLEADER. Where a person is under liability for any debt or goods in respect of which he expects to be sued by two or more parties making adverse claims thereto, he may bring the adverse claimants before the court, or compel one of them to relinquish his claim by a mode of procedure called "interpleader." The same mode of procedure is available for a sheriff or sheriff's officer taking goods in execution which are claimed by a third party.

E. S.

INTERRUPTION OF PRESCRIPTION.
See PRESCRIPTION.

INTERSTATE COMMERCE LAW (U.S.A.). The constitution of the United States, while leaving to the authorities of the several states the right and duty of controlling the operations of common carriers, reserves to congress the right to regulate commerce between the states. When the constitution was framed, this provision was chiefly intended to prevent the individual states from erecting custom-houses on their borders, or in any wise taxing the business which should originate in other parts of the union. But as time went on it began to have an important bearing on railway regulation. For the through or "interstate" traffic tended to increase in volume faster than the local or state traffic, until, in 1886, it furnished from three-quarters to nine-tenths of the business and the revenue of many leading lines. Under these circumstances, local legislation which could only affect a small part of the traffic of such lines was obviously of little

use; more especially since fairness in railroad rates is a relative matter, and the justice of a local charge depends not alone on conditions affecting that shipment by itself, but also on the scale of charges adopted for through traffic on the same line.

The United States courts did all that they could to meet this difficulty; but there was a clamour for legislation which should settle the principles to be applied more definitely and speedily than the courts were likely to do if left to themselves. The first attempts to secure such legislation were made in 1873; but it was not until 1878 that a systematic and continuous agitation of the subject was begun, which finally led to the passage of the Interstate Commerce Act nine years later. In 1878, Mr. Reagan of Texas, formerly postmaster-general of the confederate states, introduced a bill providing for the adoption of equal mileage rates on all the railroads of the country. Such a proposal was obviously impracticable, and was successfully resisted by the railroads. In subsequent years Mr. Reagan introduced a succession of bills, each a little more moderate than its predecessor, but all endeavouring to subject the railroads to somewhat arbitrary regulations which would have interfered with the successful conduct of their business.

The division on these Reagan bills was based not on party, but on locality. They found their chief support in the south and west, where there are many shippers and few shareholders; while they were opposed in the central and eastern states, where the railroad capital of the country is chiefly owned. These bills also commanded much stronger support in the House of Representatives than in the Senate, because the latter body is largely composed of men who are themselves property-owners on a considerable scale, and understand the fatuity of laws aimed to restrict investors' profits in any radical fashion.

Down to 1885 the moderate party was strong enough to defeat all legislation. But it had become obvious by this time that the public demanded the enactment of a law of some sort, and that it was futile to resist such a demand much longer. Accordingly the United States Senate appointed a special committee under the chairmanship of Mr. Cullom of Illinois to investigate the situation and draft a bill.

Their report was made in 1886; their bill provided that all traffic of any given kind was to be charged the same rates under substantially similar circumstances and conditions; that is, that personal preferences of every kind were to be declared illegal. It further prohibited the worse sort of local preferences by providing that through traffic should not be given a lower aggregate rate than the traffic to and from intermediate points. It made provision for certain exceptions to this rule by appointing a commis-

sion which should have discretionary power to suspend its operation in certain specific cases.

Only on the first of these points was the report of the Senate committee satisfactory to the advocates of the Reagan bill. In the matter of local preferences, they wished to secure something much more nearly approaching equal mileage rates. The establishment of a commission with power to make exceptions seemed to them likely to make the whole law nugatory, and they were therefore opposed to its creation. On the other hand they were extremely anxious to prohibit divisions of traffic or earnings, known in America as Pools. They feared that if competition could be restricted by these agencies, the railroads would comply with the law by raising their through rates instead of lowering their local rates.

The views of Mr. Cullom prevailed in the Senate, those of Mr. Reagan in the House. Early in 1887 a compromise was finally adopted, prohibiting pools, creating an interstate commerce commission, and wording the section with regard to local discriminations or preferences so ambiguously as to leave grave doubts as to what it actually meant. This compromise bill became law February 4, 1887, and constitutes what is known as the Interstate Commerce Act.

The ambiguity of the section concerning local discrimination placed upon the interstate commerce commission the somewhat unforeseen duty of making a provisional interpretation of its doubtful points. This interpretation, popularly known as the Louisville and Nashville decision, was made in so able a manner as to command universal respect, and was reported and quoted exactly as if it were a judicial opinion. This led to a demand for similar opinions on the part of the commission on other points connected with the operation of the law. The commission was composed entirely of lawyers, and this work of interpretation was perhaps more congenial to them than some of the other duties contemplated by the Act. This became their important work, which they did in person, while other functions were relegated to subordinates. At first their success was phenomenal. Their decisions were marked by moderation and good sense, and bade fair to create, with unexampled ease, a large body of transportation law. But the commission, as was perhaps natural, undertook a little more than it was likely to be able to carry out under the most favourable circumstances; while the retirement of Mr. Walker and the illness of Judge Cooley deprived it of the services of its two most active members. It was drawn into an attitude of hostility to the courts in certain questions of jurisdiction; and hence the influence of the commission is not so great as it seemed likely to be a few years ago.

With regard to the benefit derived from the operation of the law, there is considerable difference of opinion. It is generally thought that there are much fewer discriminations or preferences than there were when the act was passed, and that those which continue to exist are of a less glaring character. There is more publicity both of rates and of accounts than before the passage of the act. On the other hand the clause prohibiting pools has proved decidedly harmful. It has combined with several other causes to produce a good deal of depression in American railroad profits; it has more than once put responsible railroad men at the mercy of irresponsible ones; and it has prevented the development of far-sighted schemes of railroad policy which would do as much good to the shippers as to the companies. At present the prohibition is pretty generally evaded; but efforts to secure its repeal have thus far been unsuccessful (see also RAILWAYS).

A. T. H.

INTESTACY (ENGLAND). In the case of a person dying without having left any directions as to the disposal of his property answering the requirements of a valid will, or having left a will the directions of which do not deal with the whole of his property, there is said to be an "intestacy." In most countries the devolution of property as to which a person dies intestate does not depend on the nature of the property; but in England a distinction is drawn between real and personal property—real property going generally to one person, called the "heir-at-law," and personal property being generally divided among several persons, collectively called "the next-of-kin," subject in both cases to any rights a surviving husband or wife may be entitled to. The rules for ascertaining the heir-at-law and the next-of-kin in a given case are too complicated to be stated here. It is sufficient to mention that if an intestate dies leaving several sons and daughters, his real estate goes to his eldest son and his personal estate is divided among all the children, the issue standing in a deceased parent's or ancestor's place. If he leaves daughters only they all take the real estate as *COPARCENERS* (*q.v.*). The preference of the eldest son and his issue in the case of real estate, when spoken of in political pamphlets, is generally described as the "rule of" *PRIMOGENITURE*. The importance of the rule and its injustice have often been exaggerated; but although the attacks against the rule have to a certain extent subsided, there is no doubt that the time when the devolution of real property will be made equal to the devolution of personalty cannot be far distant. It should be pointed out that the general rules as to the descent of real property are in some places displaced by local custom (see *BOROUGH ENGLISH*; *GAVELKIND*); as to personalty, all such special customs have been

abolished by the "Act for the Uniform Administration of the estates of Intestates" passed in 1857. The rights of the surviving husband or wife of an intestate are not of much practical importance as regards realty (see *HUSBAND, AS TO WIFE'S PROPERTY*; *DOWER*); the personal estate of an intestate wife goes to the husband, whether there be children or not; on the other hand the widow of an intestate receives one third of his personal estate, if there is any issue, and one half if no issue survives. It is further provided by the Intestates' Estates Act 1890 that the real and personal estate of any man dying intestate, and leaving a widow but no issue, shall, if of a net value not exceeding £500, belong to the widow absolutely and exclusively, and also that in case the net value exceeds £500, the widow shall have a charge upon the whole estate for £500.

Real property situated in England descends, according to English law, without any regard to the domicile of the owner (see *DOMICILE*); the devolution of personal property on the other hand is regulated by the law of the intestate's domicile without any regard to the local situation of the property (see also *ADMINISTRATION, LETTERS OF; ADMINISTRATOR*).

E. S.

INTIERI, BARTOLOMEO (1677-1757), was a Florentine ecclesiastic. He founded the chair of political economy at Naples in 1754—the first in Europe—under the title of a professorship of commerce and mechanics. He attached three conditions—(1) that the teaching should be entirely in Italian—this was contrary to the custom of the time, all scientific teaching being then in Latin; and was intended to obtain a wider circle of students. (2) That *GENOVESI* (*q.v.*) should be the first professor. (3) That after his death no ecclesiastic should be appointed to the chair.

Intieri is supposed to have assisted in suggesting to *GALIANI* (*q.v.*) the principles on which his work was founded (Ingram, *History of Pol. Ec.*, p. 72). His influence over economics was therefore considerable, though he left no original work of his own.

A. B.

INTRINSIC VALUE is attributed to an article when it (1) is not "spontaneously supplied by nature," but "requires labour to obtain it"; and (2) is "useful for other purposes than being employed as money" (Fawcett, *Manual*, bk. iii. ch. v.). Or one only of these attributes may form the definition; the term thus coinciding with "real value," which sometimes means the quantity of labour required for the production of an article (Ricardo, *Principles*, ch. xx. and *passim*), and sometimes "the amount of necessities, comforts, and luxuries of life" that it will purchase (Marshall, *Principles*, p. 666).

The term, in one of these senses, is often employed in monetary theory. For instance,

Ricardo, "Gold and silver, like other commodities, have an intrinsic value" (*High Price of Bullion*, par. 1); and Fawcett, "the substance chosen as money should possess an intrinsic value."

There is no objection to this terminology, if it does not suggest the misconception that all value is intrinsic, that inconvertible paper-money cannot possibly act as a medium of exchange and common denominator. The erroneousness of this view is well shown by Professor Walker (*Money*, ch. i. and xiii.). To avoid the suggestion of error, it might be better to speak with Senior of "intrinsic causes of value" (*Pol. Econ.*, p. 16); and to follow those who assert that "nothing can have an intrinsic value" (BARBON); "it is a contradiction in terms" (Macleod, *Credit*, ch. ii. §§ 17-18).

But when we use the term in this sense—or want of sense—we incur the danger which often attends correction of popular phraseology; namely, that some important property may be lost sight of. If, with Jevons, we regard value as a mere ratio of exchange (*Theory*, ch. iv.), let us take care, with Jevons, to remember that "there is a close connection" between value in this sense, and "esteem" or "final degree of utility" (*loc. cit.*). The relation between value in exchange and the other attribute of "intrinsic value," viz. cost of production, is not less likely to be lost sight of. The author of *A Critical Dissertation on Value*, S. BAILEY, may be instanced as one who incurred these dangers when he maintained that value is nothing positive or intrinsic, but merely a relation in which two commodities stand to each other. Locke uses the phrase in a sense which may be gathered from the subjoined passages:—"The raising of one species of your coin beyond its intrinsic value is done by coining any one species with less silver in it than is required by that value it bears in your money." "Silver which makes the intrinsic value of money." (See Locke's *Considerations of the Lowering of Interest.*) F. Y. E.

INVECTA ET ILLATA. The right of hypothec, which came to be of general application in Roman law, was first established by the praetor in case of a tenant-farmer agreeing with his landlord that the farming stock brought into his holding (*invecta et illata*) should become security for his rent. According to Roman law, movable property of a tenant put into a town-house warehouse, and (*invecta et illata*) under a contract of letting and hiring, was hypothecated to the landlord by operation of law without any agreement to that effect. E. A. W.

INVENTORY DUTIES. See DEATH DUTIES.

INVESTMENT. The investment of money by an individual means either some form of lending the money at interest, or its exchange for property from which a profit, rent, or in-

come of any kind is expected, whether this property is already in existence or is being produced by those to whom the money is paid. The money invested may be either on the one hand the proceeds of the repayment of a loan, or of a sale of property, or on the other hand an amount saved from income. In the first case the investment, or more properly the reinvestment of the money, is simply the completion of an exchange of one sort of property for another: when, for example, a man sells a house and buys with the proceeds a share of a ship, he has merely exchanged the house for the share of the ship. The amount of money which can be invested or reinvested in this way is only limited by the extent to which exchanges of property take place; the more property is bought and sold the more money there will be to invest or reinvest. But the amount of money which can be invested from savings is a strictly limited quantity. It obviously cannot exceed the amount saved, and it must also, unless useless hoards are accumulated, always come up to that amount. There is an impression that savings may lie in a country "idle" or uninvested, but in a country like England this is never the case. If it be inquired where the accumulation of idle savings or uninvested money is to be found, the invariable answer is "In the banks." But if the balance-sheets of the banks be examined it will be seen that, after accounting for the amounts in transit between one bank and another, almost the whole of the "money" in their possession has already either been lent at interest, or spent in the purchase of securities. The term "money" in this case is merely applied to a figure representing the number of pounds the banks' various investments are taken to be worth. Even the balance which a bank holds at the Bank of England, and which to the bank which keeps it there is really "idle money," may be and frequently is lent out again by the Bank of England itself. The comparatively small quantity of money remaining is as necessary and useful to the banks as the small quantity which an individual carries in his pocket is to him, and though apparently at rest has been well described as the most "hard-worked" money in the country.

The savings and the new investments of the world are in short identical. They are the additions made to the accumulated wealth of the world, the new railways, roads, houses, mills, canals, and such like things, and the improvements effected in the old ones. When it is said that £200,000,000 a year is saved by a community what is meant is that £200,000,000 worth of its annual produce is not consumed but is added to its accumulated wealth or capital.

Though the amount the community adds to its capital depends on the amount saved by

individuals, the individuals who save do not in all cases settle in what form the additions to the capital shall appear. When a man lends his savings without stipulating how they shall be employed, or lets them "lie" at a bank, he practically delegates the decision of this question to the borrower, or the banker. Similarly, when he buys already-existing property, he virtually delegates the decision to some one who, having sold existing property, invests the proceeds in new property. What the new capital of a community shall consist of thus comes to be settled to a great extent by a special class of financiers, promoters, and speculators.

E. C.

The investment of capital by an individual in an undertaking already existing is only a transfer of the command of currency from one person to another. It makes no diminution in the floating cash in the banks, but places the command of a portion of it in one hand instead of in another. Where banking is fully developed, it does not even momentarily diminish available currency. The transfer as a rule is carried out by cheque, and the only effect upon currency is in the extent to which bankers may think it desirable to increase their cash holdings in times of more active demand. In the case of the investment of floating capital in a new undertaking, as in the construction of works not immediately productive, there is a diminution of the immediate purchasing power of the community. It diminishes by so much the amount of consumable or exchangeable goods that can be produced. If the country be previously producing enough only for its own support, it must now import to supply some part of its requirements. If it had already imported, it must now import more. The immediate effect upon the money market is, that the exchanges become unfavourable, and bullion must be exported.

If investments be made in a foreign undertaking, whether a new one or one already in existence and under foreign ownership, the effect is the same. It diminishes the immediate power of taking goods from abroad, substituting therefor an increased power in the future. But the capital is, nevertheless, really locked up, and great danger may arise from this fact being disguised by credit issues. The financial crisis of 1846-47, and some others of equal importance, have been ascribed to the too rapid conversion of floating capital into fixed capital. It would give, perhaps, a more exact view of the condition of these times to describe them as resulting from the undue expansion of credit founded upon the fixed capital invested.

R. W. B.

INVOICE. A statement giving particulars of goods forwarded by a trader to a customer, and of their cost, and of the charges concerning the same. Some foreign countries require invoices to be legalised by their consuls, or verified by declarations as to their accuracy.

The omission of the prescribed formalities may cause the custom-house authorities at the port of destination to forbid the importation.

E. S.

INVREA, FABIO, a Piedmontese marquis. The book he wrote, though little known, deserves notice for the able development of the theory of wealth which it contains.

Discorsi sulla pubblica ricchezza, ossia sopra di quanto la costituisce, sulla di lei origine, aumento e ripartizione (Genova), 1846.—Referred to in the *Bibliografia dei Trattati e compendii d'Econ. politica scritti da italiani dal 1765 al 1891*, by Prof. Cossa.

A. B.

I.O.U. An acknowledgment of indebtedness worded as follows: To A.B.—I.O.U. [I owe you] £10—signed C.D. If such a document contains a promise to pay, it should be stamped as a promissory note.

E. S.

IRISH CURRENCY. This term at the beginning of the present century denoted a money of account different from that in use in England. It disappears with the act of 1825, which finally assimilated the currency of Ireland to that of Great Britain.

The English denominations of money came early into use in Ireland. The value and the rating of coins were both tampered with on occasion, alike by the sovereign, and, apparently, by the Irish parliament; and throughout the variations in the intrinsic value of the English coinage, the Irish coins appear to have remained always less valuable. The records of receipts of revenue between Henry VIII. and James I. give amounts both in English and Irish currency, the latter being accounted less valuable by one-third, so that the amounts of English are three-fourths of the amounts in Irish currency. In fact there existed exactly the state of things described in the article on **COLONIES: DENOMINATIONAL CURRENCY IN**.

By a proclamation of James II. when a fugitive in Ireland (25th March 1689), the guinea is rated at £1:4s. Irish, and the shilling at 18d. Irish. This seems to be the first establishment of the ratio afterwards more particularly associated with the term "Irish currency"; and it is therefore incorrect to date that ratio from W. Wood's halfpence (1725), as Mr. Culley does in his evidence cited at foot.

This ratio, which subsisted through the 18th century, gave a difference of $8\frac{1}{2}$ per cent on amounts of English converted into Irish money. All transactions between the two kingdoms were adjusted on this basis, and this inconvenience tended to enhance the premium on bills of exchange which between 1812 and 1815 had risen to 10 per cent; so that £118:6:8 Irish money was required to pay a debt of £100 in England. After the union this became more and more intolerable; the first important measure in alleviation was that of 1817 which authorised the transfer of

government and certain other funds between the kingdoms at the so-called *par* of $8\frac{1}{2}$ per cent. The anomaly was abolished by the act of 1825 (6 Geo. IV. c. 79), which assimilated the currency in all parts of the United Kingdom, and enacted that contracts entered into previous to the date of the act should be satisfied by a payment in English currency of $\frac{1}{3}$ of the amount expressed to be owing in Irish currency. The copper tokens of Ireland were called in under the same act.

[*House of Commons Papers*, 1868-69, vol. xxxv. pt. 2, p. 379. Evidence of Mr. Culley before the Commission on International Coinage, 1867-68.—*Kelly's Cambist*, 1831, pp. 401-403.] C. A. H.

IRISH LAND LAWS. See LAND LEGISLATION, IRISH.

IRON AND STEEL AS MONEY. Little doubt exists as to the extensive use of iron as money in very ancient times (probably in the period from 1000 to 600 B.C.), though, on account of the rapidity with which that metal rusts, no specimens now exist, and their exact form is therefore uncertain. Probably, however, they resembled in shape the small ingots which are found in use at the present day in Central Africa.

Experiments were made at the Royal Mint, London, in the year 1884, with a view to discover what would be the rate of wear of steel coins. The average wear after 26 hours' friction was .0032 grammes of soft steel and .0029 grammes of hard steel coins. When soft and hard steel coins were subjected to friction together, the soft coins lost, after 52 hours' friction, .0077 grammes, and the hard coins only .0042 grammes. The amount of metal lost, even in the case of the hardened steel, approximates closely to the loss sustained by standard gold and silver coins, when subjected to the same process.

F. E. A.

IRREGULARITY OF EMPLOYMENT is more a social than an economic question, and it is one which the earlier economists hardly noticed. It has of late years been thoroughly recognised as an evil requiring careful investigation. The board of trade is now carrying out inquiries which it is hoped will throw considerable light on this subject. The Americans have also been paying much attention to it, but without particular success. At present, therefore, no series of well-observed facts exists to support generalisations on the subject.

Inconstancy of employment, as Professor Marshall terms it, is one of the chief conditions which presents itself for consideration in connection with the mass of unemployed in all countries. It may in this connection be viewed either as a result or a cause. Some men are so inefficient, so lazy, or disinclined for regular work, that they prevent themselves from being regularly employed. And in dealing with questions of irregularity of employment, it is of

primary necessity to decide whether the case in point is such a result or no. It is only when it is a cause of distress arising outside the worker himself that its consideration falls within the proper sphere of economics. Here it is closely connected with the problem of the "unemployed."

The causes of irregularity in employment are :

(1) Essential conditions of the occupation—the work of the painter and mason are liable to be interrupted in certain states of the weather—the effect of a season on the demand for certain goods. Thus furriers are much harder at work in the autumn ; and it is in evidence before the labour commission (C. 6708, III. 1892, p. 44) that in the confectionery trade the girls are often out of work from December, when the Christmas demand is over, up till February.

(2) Accidental circumstances which indirectly produce irregularity :

(a) The use of machinery. Of itself the use of machinery might be quite regular in effect, but constant labour-saving improvements tend to displace labour. The tendency of employers to produce in excess of the current demand is not strictly attributable to machinery, as suggested in evidence before the Labour Commission (C. 7063, I. 1893).

(b) Fluctuation of trade, produced by causes perhaps too complicated to classify roughly, but arising from the competition : (a) of home manufacturers, (b) of foreign countries. Thus "foreign tariffs" were cited before the labour commission as a cause of irregularity in employment : and the fall in prices was suggested as having that effect in the course of the enquiries of the Gold and Silver Commission, and that on Depression in Trade (1886).

The above heads probably include all the causes at work, but the analysis is not perfect. "Influx into towns," by which is meant over-competition of hands for any given work, has been cited as another cause, but this really only describes one of the conditions arising in part out of irregular employment ; though doubtless the condition reacts so as to make matters worse.

DOCK LABOUR (*q.v.*) presents probably the worst instance of irregular employment, certainly the most prominent at the present time. It is in evidence before the labour commission that the average number of months for which the labourers were at work was seven ; the rest of the year they used to "hang about the gates and starve"—the evil is the irregularity of employment reducing the average wage to 10s. a week ; some only get 5s. ; some are out of work for months" (C. 6708, II. 1892, pp. 9 and 12). On the other hand one witness of great experience (Mr. Hill) contended that this state of things was the fault of the men. At the time of the late dock strike attention was directed to the importance of regulating the labour, and something has been done in this direction.

As above stated, the problem whether it is possible to counteract irregularity in employment has only recently come up for solution. Professor Marshall doubts if the evil which "rightly attracts public attention" is greater than it was in past ages.

The palliatives or remedies hitherto suggested are practically but three, which require consideration in detail.

(i) It is contended that the remuneration or wages of an irregular employment tend to be proportionately higher than those which are more regular. Professor Marshall lays this down, (*Econ. of Ind.*, 1881, vol. i. p. 537), and instances the medical man.

(ii) The eight hours day is relied on by several witnesses before the labour commission for making employment more regular. No one, however, has explained how this effect will be manifested. It cannot of itself affect the irregularity arising out of the use of machinery or fluctuations of trade; and as it will tend to increase the productiveness of the labour employed, it will not immediately stop over-competition by opening avenues for the unemployed. Yet if it is allowed to come naturally, and as the result of experience, it will combine with other causes to operate in the direction of greater regularity.

(iii) Organisation of all labour as far as possible into permanent services with some security of tenure for the individual seems the most hopeful solution. The most prosperous employes as a body at the present day are those of the great railway companies, and next to them those of some large firms where a reciprocal feeling exists between masters and men, resulting in permanence of engagement accompanied by provisions for sickness and old age. The elimination of daily competition is the first step to the better regulation of labour. At the same time there should be ample power to dismiss bad and incompetent men. This has always been the difficulty in the organised system, and is precisely the point where the trades-union system is apt to break down.

Finally, it has been suggested as an advantage in irregular forms of employment, that there are periods of leisure. But when these are prolonged, there is a danger of anxiety as to the future which more than compensates for enforced idleness. Leisure to be valuable should be accompanied by regular employment.

[Professor Foxwell, *Irregularity of Employment and Fluctuations of Prices*.—Marshall, *Economics of Industry*, vol. i. pp. 537-38, 736-37.—Reports of Labour Commission, *passim*, especially Tom Mann's evidence in C. 7063 (1893), vol. i., and Sidney Webb's in *id.* vol. ii. See Evidence of Select Committee on Unemployed, 1895; and G. H. Duckworth in *Econ. Journal*, March 1896.]

C. A. H.

IRRITANCY (Scots law). Forfeiture of lease or of tenancy in FEU through some neglect or contravention. This may arise by force of law, or under the terms of the contract. Irritancies arising by force of law—such as loss of a feu through non-payment of the

feu-duty for two years—are purgeable at any time before judgment by payment or restitution or fulfilment of the condition. An irritancy arising from agreement can, in general, not be so purged.

[Rankine, *On Leases*, 461.]

A. D.

ISELIN, ISAAK (1728-1782), a Swiss physiocrat. He belonged to an old business family of Bâle, and passed the greater part of his life in his native city, where, after vain attempts to obtain a professorship at the university, he was elected, in 1756, secretary to the council (secretary of state). In this position he displayed great literary capacity, occupying himself at first with philosophical and historical subjects, but labouring entirely during the last ten years of his life (1772-1782), under the banners of the physiocrats. To the older pre-physiocratic period belong his works: *Patriotische und Philosophische Träume eines Menschenfreundes* (Patriotic and Philosophic Dreams of a Philanthropist), 1755, and *Geschichte der Menschheit* (History of Mankind), 1762. Both compositions show little originality. The second named exhibits a rather arbitrary reading of history, somewhat in the sense of the later *Esquisse* of CONDORCET. The change to the doctrines of the physiocrats is first obvious in the *Versuch über die gesellige Ordnung* (Essay on Social Order), 1772, where it is said in the preface that an "able man" (was it Schlettwein?) had some time before directed him to the study of the French economists. But the instruction seemed obscure to him, and "the fervour with which some defenders of these truths extolled the discoveries of their teachers seemed to me to be charlatanry rather than that honourable zeal for the truth which animates noble minds." Afterwards, by good fortune, the EPHÉMÉRIDES DU CITOYEN (*q.v.*) came into his hands, after reading which, QUESNAY became in his eyes "what NEWTON is in the eyes of a mathematician." The new standpoint comes to light, fully matured, in the work which appeared four years later:—*Träume eines Menschenfreundes*. (Dreams of a Philanthropist), 1776. This book is by no means a second edition of the work published in 1755, as is generally supposed, and as might have been conjectured from the kindred title, but quite a new work. He expresses himself thus on the subject, in the preface: "What I put into print twenty years ago under the title of *Patriotische und Philosophische Träume eines Menschenfreundes*—(Patriotic and Philosophic Dreams of a Philanthropist), and what I now publish entitled *Träume eines Menschenfreundes* (Dreams of a Philanthropist), although they agree in design, are nevertheless two quite different things. Those were merely sentiments of a young man, to give a new edition of which would be quite needless, and which may fairly be allowed to sink into oblivion." Iselin

thus publicly retracted his old ideas in favour of the authors who had adopted Quesnay's teaching, as the Marquis of Mirabeau, Baudeau, Comte d'Albon, and others. Commencing from the same year, 1776, Iselin published a monthly journal in German, dedicated to the propaganda of the doctrines of the economists; this bore the title, borrowed from the French organ of the school, *Ephemeriden der Menschheit* (Ephémérides of Mankind, or Library of Moral Philosophy and Politics). This soon gained a great reputation in German-speaking countries, and numbered among its contributors many of the most prominent economic authors of Germany. After the death of Iselin, which took place in 1782, it was carried on under the editorship of G. W. Becker, professor at the "Adeligen Gymnasium" in Dresden. For the rest, Iselin did not in all points agree with the "eminent Quesnay." He would have allowed the IMPÔR UNIQUE to be assessed progressively instead of proportionately; and if indeed he occasionally says with Mirabeau that the best corn law is *none*, yet elsewhere again he defends the public granaries condemned by Quesnay. How unhistorically, besides, Iselin reasoned, regardless of his former historical studies, is shown in the passages in his *Träume* (Dreams) where he maintains that only "chance and caprice have produced the difference between one people and another people," and when he then concludes that "everywhere likewise the laws must be the same, what is just in China must necessarily also be so at San Marino." Human institutions have corrupted the natural order, and Iselin concludes his *Träume* (Dreams) with an ideal constitution, by means of which "instructive fiction" he tries to reconcile the republicanism of his Swiss fatherland with the enlightened despotism recommended by Quesnay. Finally, Iselin proves himself to be a true son of his generation, anticipating the complete salvation of mankind in the *education* of the people. This caused Basedow, the German apostle of education, to appear to him, with Quesnay, the person most worthy of emulation.

[A. v. Miaskowski, *Isaak Iselin*, Basle, 1875.—W. Roscher, *Geschichte der National-ökonomik in Deutschland*, 1874.] A. O.

ISNARD, ACHILLE NICOLAS, born in Paris, died in 1802 or 1803. He published, anonymously, in 1781, a *Traité des Richesses* (London and Lausanne, 2 vols., 8vo), and in 1801 his *Considérations théoriques sur les Caisses d'amortissement de la Dette Publique* (Paris, 1801). The former is directed against the theory of the *produit net* and of the single tax of Quesnay; Isnard does not mention Adam Smith, although generally concurring with the latter's views on the origin of wealth, the effects of protection, and of the accumulation of gold and silver, etc.

Isnard, who was an engineer, has frequently recourse to mathematical symbols, although

he does not venture farther than equations of the first degree and simple problems in the rule of three. As having done this, he is mentioned by Jevons in his *Theory of Political Economy*, 2nd ed. 1879, appendix i. p. 301. E. Ca.

ISOLA, FRANCESCO (first half of 19th century), Italian economist, is mentioned by A. Graziani in his *Idee economiche degli scrittori Emiliani e Romagnoli sino al 1848*, etc., Modena 1893, pp. 156-7. He was appointed, by the papal government, a member of the committee for the reform of the commercial code, and found in the materials thus provided the basis of his treatise on political economy. Isola was a protectionist, for though nominally a supporter of free-trade, he admits many exceptions to this principle. He proposes to prohibit the import of such articles as would injure the sale of similar home products; and also to limit the goods imported, fearing a general excess of production. He also discusses general values, considering that these originate in the demands of consumers, and in the scarcity of the goods themselves. He considers that with respect to money it is its intrinsic value as a commodity which, together with rapidity of circulation, forms the total purchasing power of the circulating medium, and determines the quantity of goods a market may require. He wrote also on interest and taxation, recommending that this should fall on superfluous wealth, and recommending indirect taxation.

Istituzioni di Commercio e di Economia civile, Roma, 1811. A. B.

ITALIAN SCHOOL OF ECONOMISTS.

Introduction, p. 460; The Early Phase, p. 461; Superficial and Optimistic Phase, p. 465; Scientific Phase, p. 466.

No one now, we imagine, would agree with Augustin Thierry, in characterising political economy as "cette science bourgeoise surgie dans les villes d'Italie," nor would conscientious scholarship ever entitle Italy to take the earliest place chronologically in economic research. Nevertheless it is beyond question that the early development of commercial wealth in mediæval Italy, the vigorous industries and economic inter-relations of her republican cities, attracted Italian thinkers early to the study of political economy. Italy can boast of a prominent position in the history of the science from the remotest times.

Italian economic thought, when traced from its first sources down to the present day, shows in its evolution, though chequered by many irregularities, three well-marked stages, corresponding to certain analogous conditions of the social evolution of the country. There is at first a roughly-developed, almost archaic phase of economic inquiry, the product of *patriarchal* economic relations; to this succeeds the *super-*

ficial and optimistic phase of the science, the product of the *small industry* system, when wealth was still scanty and distributed fairly equally; finally there is the *scientific* phase, developing with the expansion of capital. The first phase extends from the middle of the 13th to the end of the 18th century; the second carries us on to 1870; the third, initiated about 1870, is developing beneath our eyes, and may not yet have attained its maturity.

1. *The Early Phase.*—Economic thought in Italy seizes at the outset on the more obvious forms of social life, and advances gradually to investigation of the less obvious phenomena. Thus every phase of economic science is distinguished from its preceding phase by the deeper nature of its inquiries. The few early writers of Italy who touch on economic questions, put forward only external points, and, instead of analysing them closely, confine themselves to praise or criticism from a purely theological standpoint. The first advance in more thorough-going inquiry is found in the writings of political thinkers who are only concerned to trace the outlines of economic conditions in so far as these subserve their theories on legislation and administration. Hence when writers enter for the first time on the field of genuine economics, they turn to the most obvious and external economic subject, namely to currency; and a rich and varied literature rises and flourishes round that subject. Greater depth is attained in analysis of inland and foreign trade and its regulation. Thence the way is opened up to the investigation of value; the first treatises dealing with the more external manifestations, secondary forms, or market values, without bringing out the inner *nexus* connecting value with distribution of wealth. Not till the termination of the early phase do we come across some passing observations on the production and distribution of wealth; but these embody no definite doctrine.

One of the first Italians in the 13th century to reflect on economic facts was St. Thomas AQUINAS, who set himself to oppose usury,—both by authority of the Bible, popes, and councils, and on the principle that time belongs to God and may not be sold. He also wrote learned treatises on monetary and fiscal politics, with acute remarks on the nature of wealth. The theological standpoint is no less dominant in the 14th century, when both Paolino Minorita (1315) and Egidio Colonna (1247-1316) wrote. The former treats of the management of landed estates, of the family, and the citizen; the latter, of taxes. In the 15th century theological economics were developed in the writings of St. ANTONINUS, archbishop of Florence (1389-1455), and of St. Bernardino of Siena, who wrote in the first half of the 14th century. They reach the real gist of the theory of the circulation and distribution of

wealth from the basis of theological morality, though they too have their say against usury. In the 15th, 16th, and 17th centuries the disquisitions of theologians become more interesting and practical, stimulated by the new phenomena of deposit and loan banks of the Monti di Pietà (see MONTI DE PIETÀ) and the public revenue derived therefrom. The banks, defended by some theologians, were assailed chiefly by the Augustinians. The Monti di Pietà were condemned by the Augustinian Nicolò Barianno and the Dominican Tommaso DE VIO, but defended by the Franciscan Da Busto and others. Even the mechanism of bills of exchange became at that epoch the subject of subtle polemics among theological writers, some of whom, like Fathers Bernardo GIUSTINIANI and Ortensio Capellone, attacked profit derived from exchange operations, while others, like Fathers Antonio di San Salvatore and Basilio Alemanni, defended it.

Meanwhile a more discriminating and scientific tendency began gradually to replace the older scholastic and religious views; attention was paid to reasons of state and the practice of good government. Some timid manifestations of this tendency had not indeed been wanting at remoter epochs. In the 14th century Petrarch, in his book *De republica optime administranda*, expatiated on justice and moderation in imposts and on the abuses of farmers of taxes. Andrea de Isernia too, the Neapolitan legist, expressed some remarkable opinions as to the extent to which domain land might be alienated, and on farming of taxes. In the following century this scientific tendency makes a greater advance through the writings of Giovanni Gioviano PONTANO, Benedetto Cotrugli, and especially Diomede CARAFA, who in his work *De regis et boni principis officio* gives expression to ideas, new in part, on the utility of commerce and on the harmony between incomes and public expenditure, on the convenience of farming taxes, and on the assessment of taxes. The 16th century can boast of still greater progress in the same direction made by men like Matteo PALMIERI, Francesco GUICCIARDINI, and Nicolò Machiavelli. The first occupied himself largely with political economy, advocating proportional taxation. The second frequently introduces economics into his historical writings, and with great skill traces the contrast between *proportional* and *graduated taxation*. The third insists on the economic necessity of good government, recommends that to ensure prosperity to industry the state should guarantee the security of property and grant bounties to the most skilled and capable producers; he also maintains, like MONTESQUIEU later, that countries are populous in virtue of the goodness and mildness of their respective governments; and, finally, anticipates MALTHUS in affirming that there is a limit to the powers of production of the soil which checks the indefinite increase of

the human race (see in particular bk. ii. of the *Storie Fiorentine*, chs. i. and ii.; also the discourses on the first *Decade* of Livy, bk. ii. chs. iii. and v.). Even with greater force than Machiavelli, Giovanni BOTERO had held this argument in his work *Ragione di Stato, con tre libri delle cause della grandezza e magnificenza delle città* (three books dealing with the causes of the greatness and magnificence of cities) (1589), in which he insists, from the political standpoint, on the necessity of providing an equilibrium between the increase of population and that of subsistence, and urges the foundation of colonies as a remedy for an excess of the former. Botero moreover has some remarkable observations, inspired if it is true in part by BODIN, on government monopolies and on the restraints placed on commercial liberty.

The evidence of the advance amongst Italian thinkers in the direction of abandoning the general and abstract considerations so dear to the ancient writers for a thorough investigation of their social mechanism, is seen in the very numerous contemporary treatises on currency. The deplorable state of the Italian monetary system, the continual debasement of coin by different rulers, and the great variety of coins current in the different states of the peninsula, to the great detriment of trade, could not fail to engage the attention of economists, and it is no marvel if, as GANILE said, Italy was always famous for the worst currency and the best writings on currency. First of these in order of time is the *Discorso sopra le monete e della vera proporzione fra l'oro e l'argento*, 1582, by Gaspare SCARUFFI, who was first to propose the international unification of monetary systems and universal, or at least European, bimetalism with a ratio (corresponding to that in force in his day) of 1 to 12. After Scaruffi, DAVANZATI (1588) published two short treatises, remarkable for elegance of style, one on coinage, in which he maintains that the expenses of mintage should be borne by the state, the other on exchanges. Unlike other writers, e.g. BROGGIA, who exaggerated the importance of money as facilitating hoarding, Davanzati does not lose sight of money as an instrument of circulation, comparing it to the circulation of the blood, which, if congested at any point produces atrophy and dropsy, whence he concludes that an equal distribution of money should be brought about in all parts of Italy. Geminiano MONTANARI (1633-1687) opposes the sweating of the coinage by rulers, and lays down useful precepts on the methods of regulating judiciously the circulation, with suggestive remarks on money. Still more distinguished and less remote from the actual focus of the science are the works of GALIANI on currency (1750),—free from most of the prejudices of mercantilism,—of PAGNINI, *Sul giusto prezzo delle cose* (On the fair price of Commodities) 1751, which contains profound reflections on the different characteristics of the circulating medium in ancient and modern economy, and the excellent *Osservazioni sopra il prezzo legale delle monete* (Observations on the legal price of Money)

by Pompeo NERI the Florentine (1751). But all these writers who investigate currency from the standpoint of the mint and the state rather than from that of the economist, are excelled by Antonio SERRA of Cosenza, who in his *Breve trattato delle cause che possono fare abbondare li regni d'oro e d'argento* (Short treatise on the causes which can lead to abundance of Gold and Silver) (1613), sets forth lucidly a theory of money in relation to international trade, admirably elucidating the mechanism of exchange and showing that a favourable exchange, believed by his contemporaries to be effected by sovereign decree, is the natural result of excess of exports over imports, and that therefore the only way for a nation to secure and maintain it is by promoting industry and encouraging enterprise, and not, as MUN said later, by imposing custom-duties on manufactured imports; especially, maintains Serra, by developing manufactures, inasmuch as these have an indefinite possibility of increase, while agricultural commodities follow the law of DIMINISHING RETURNS. A remarkable forecast this of the famous law expounded later in England by WEST, RICARDO, MALTHUS, and J. S. MILL. Not less praiseworthy is the vehemence with which Serra opposes the debasing and sweating of the coinage,—the very mode, on the other hand, occurring to M. Antonio DE SANCTIS as the best for remedying the fall in exchange and the crises in the kingdom of Naples.

To the list of writers on currency we may add the names of Domenico and Luigi DIODATI, of TURBOLI, and of Romeo BOCCHI (1621), who treated with ability of payments and compensations. There are other writings called forth by the establishment of banks at Venice and Genoa, but unimportant as regards theory.

The analysis of currency naturally led Italian economists on to study the kindred, perhaps deeper, subject of international trade. They discussed various systems referring to the economic conditions of the day. The difficulty of importing foreign corn through defective transport, together with the increase of population which began to press on demand, induced economists, e.g. SEGGI (1602), and TAPIA (1638), to favour the system of *annona* (stores), called the *Sistema Annonario*, or system of providing food, and of corn stores (GRENIERS D'ABONDANCE), intended to ensure the country abundance of food by stopping exports. These arrangements, which were urged on by the complaints of agriculture, stifled the improvements in transport, which would have rendered the importation of grain possible; meanwhile the increase in population made this necessary. The discussion thus aroused gave rise early to controversy, and led to the institution of the MERCANTILE SYSTEM, which, while allowing the free importation of raw produce, lays prohibitive duties on the import of manufactures, seeking to develop national manufactures while sanctioning the introduction of cheap foreign corn. Mercantilism in its primitive form was defended by BELLONI (1750), an author commended by Sir James STEUART—

Belloni recommended that export of money should be prohibited. This doctrine was fully expounded by Antonio GENOVESI (1765), unquestionably the most illustrious of Italian mercantilists, who popularised the system among southern writers, whilst the negative side of mercantilism, free trade in corn, found a brilliant apostle in the Abbé Galiani (1770).

Mercantilism was bound to meet immediate opposition; the serious injuries which it inflicts on landowners—ever uneasy and influential—and the fiscal burdens which it inflicts on trade, could not fail to favour the growth of an opposite view, termed by Cossa *Agrarian protectionism*. This, inspired by the landed interest, desired to lay heavy duties on import of grain, and insisted on free export of manufactured goods. Its most noteworthy representatives are PASCOLI (1733) and BANDINI (1775). Economists everywhere in Italy have remained loyal to the doctrine of restriction of trade, more in the form of mercantilism than of agrarian protection, and this even when the theory of free trade had matured in France and England. Even the influence of theories of the physiocrats, so evident in BECCARIA and VERRI, did not remove this predilection. The solitary luminous exception in this as in other respects is afforded by ORTES, who, proceeding on different principles from those of the physiocrats, and, as we shall see, positively original, concludes in favour of absolute freedom of foreign trade.

Nevertheless many Italian economists of this first period were in favour of free inland trade, either combating the abuses of trading corporations—GENOVESI, VERRI (1771), and BECCARIA (1769); or calling for their total suppression—VASCO (1794), FABBRONI (1778), and GIANNI.

Much less valuable is Italian economic opinion on finance. There is throughout a predilection for taxes on land, due much less to the influence of the physiocrats than to the distinctly agricultural character of Italy in past centuries, and the almost entire absence of manufactures. To the taxes on land which Botero, Bandini, and FILANGIERI (1780) advocated as the only source of revenue, Genovesi proposed to add the poll-tax; Verri, duties on exports of raw produce, and imports of manufactured goods; Ammirato (1594) excise duties; BROGGIA (1743), beside taxes on land and manufactured goods, advises a tax of the tenth of all capital producing interest, with moderate customs and an excise on provisions. But none of these writers has the remotest idea of the possibility of a tax on profits, which holds so large a place in the system of RICARDO,—a remarkable fact, as showing how slightly capital, and the returns from it, had as yet been developed. Filangieri's proposal for extraordinary revenue deserves to be commemorated. He recommended the

institution of a fund for the use of the more deserving and enterprising citizens, who were to be bound to repay the advances which had been made them when called on to do so by the state. There are also interesting discussions by writers on finance on the exemption from taxation of the nobility and clergy, which the most eminent—such as Genovesi, Bandini, Fra Paolo Sarpi—vigorously condemned.

These empirical studies, which discussed only practical questions, were soon followed, partly owing to the foundation of chairs of political economy at Naples (1754), Palermo, Milan, and Modena, by deeper researches extending into theory, which began, though imperfectly, to take the form of a pure science. In this connection the discussions on the theory of value are important: these were principally connected by our best economists with analyses of the theory of "money," and are distinguished by acumen and insight. In the Italian view of the theory of value, two absolutely distinct phases appear; in the former, represented by Davanzati, Montanari, Pagnini, Genovesi, and Paoletti (1772), the element of "cost" is absolutely excluded, and "value" is represented as governed wholly by "utility"; in the latter, expounded by Galiani, Beccaria, Fabbroni, value on the contrary is based on "cost of production."¹ The cause of this development of theory was a corresponding advance in the economic mechanism of society in Italy. In the first period the non-existence of free competition between producers, or else the restrictions which limited it, rendered it impossible to determine "value" by the factor of "cost," and inevitable that it should be determined by the factor of "utility." In the second period, when competition between producers was unchecked, "value" naturally tended to become commensurate with "cost of production." Nevertheless, even at a more advanced stage of their inquiries, Italian economists of that epoch always confine themselves to the more superficial and unimportant aspects of the question of value, dwelling especially on market value, and are not able to analyse the elements of the cost of production, oscillating (like VANDERLINT and STEUART) in perpetual ambiguity between labour and wages. This is not wonderful considering how childish were the ideas of the economists, even of the highest repute, respecting the production and distribution of wealth, which nevertheless are the data essential for resolving cost of production into its constituent elements. Only the very best Italian economists of the 18th century possessed any notion of the theory

¹ The position of Ortes is eclectic. Originally he deduces value from demand and supply, but afterwards he measures it by the quantity and quality of the labour employed in production and transport, and thereby explains the greater value of the commodities in the metropolis and the greater quantity of money which circulates there.

of capital, while their views on production were meagre and vague. The observations of Beccaria on division of labour are always quoted.

"Everybody proves by experience," he says, "that the constant application of hands and wits to the same kind of work and product renders the same easier, better, and more fruitful than would be the result did every one make by himself merely what is necessary to himself; whence it comes that some pasture cattle, some card wool, others spin it, some grow corn, others make bread, raiment, tools for the agriculturists and labourers, causing growth and concatenation of arts and a division of them so as to serve common and private utility among all classes and conditions." (*Elem. di Ec. Pubblica*, pt. i. ch. i.).

Here we get, it is true, the social division of labour, but nothing about its technical division, or specialisation within the same industry, an exact idea of which Adam Smith was to set forth in so masterly a manner seven years later. Yet these observations by Beccaria, and those of Verri, that in production man does not create, but confines his operations to collecting and separating material already existing, with some considerations by the same author on the influence of climate on efficiency of labour, are all that is worth gleaning from the works of the earlier Italian economists on the subject of production.

Nor do their writings on the distribution of wealth take any higher rank; inasmuch as they have not attained to an exact definition of income, wages, profits, and rent of land. Botero's view, that population is limited by subsistence, is restated by Beccaria, and more clearly still by Ricci (1787), but these writers treat the subject only in a superficial manner, and not in such a way as to entitle them, as some would have it, to be regarded as precursors of MALTHUS. Of more frequent occurrence in the writings of the economists of this epoch, e.g. CARACCIOLI (1784), PAOLETTI, Beccaria, whose remarks on wages are termed "classic" by the Russian writer Wernardski, is the assertion that high prices of provisions, and the rise in money wages which ensues, are injurious to industry,—an assertion which, put forward contemporaneously in England by a series of economists, and repeated by Smith, is the logical consequence of the theory which reckons wages among the elements of the cost and of the value of the product. One marked characteristic of the Italian economists of this period is the absolute eclecticism with which they perpetually oscillate between the mercantilists and the physiocrats, and strive to reconcile the deductions from both. Besides this it is well to note the lofty and humane principles inspiring their remarks on economic relations, contrasting favourably with those of their French and English contemporaries,—their sympathetic interest in the fate of the producer—which they consider more important than the exigencies

of production—their courageous denunciation of the wretchedness of the peasants, their thoroughgoing predilection for small farming, and finally their eloquent pleading that the legislator should intervene to mitigate economic inequality and injustice,—in these matters they sound the prelude to what is now known as socialism of the chair (see SOCIALISTS OF THE CHAIR). This tone is common to all the economists of the peninsula, and not, as some hold, peculiar to central and northern Italy, since it is equally shown in the works of the southern Genovesi, Galiani, Filangieri, and Broggia, and in those of the northern Beccaria, Vasco, and Verri, and again among the Tuscans, Bandini, and Paoletti. All our economists of whatever school concern themselves not only, like Adam Smith, with the *wealth of nations*, but also, and as much, with the *public weal*, for which the very titles of their works are the proof, namely those of Vasco, Paoletti, Palmieri, MURATORI, etc.—a significant difference, attesting the ethical and philanthropic character of economic science in Italy. This character is possibly due in part to the fact that some of our economists, like Ortes, Paoletti, Bandini, Galiani, Ammirato, Vasco, Genovesi, and Pascoli, have been ecclesiastics; others, like Beccaria, Verri, Scaruffi, D'Arco, Carraccioli, are nobles; while few only, like Davanzati, Broggia, Belloni, have been merchants or bankers. Nevertheless the generous and noble expressions to which we have referred, and which deservedly attract so much sympathy to our economists of this epoch, do not rise from the narrow limits of sentimental literature nor do they show any profound reflection on the laws of economics.

One amongst them, however, does not deserve this criticism, and rises far above his contemporaries. This is the Venetian monk Giammaria Ortes, one of the greatest economists of the 18th century.¹

¹ *The opinions of G. Ortes*.—G. Ortes was unquestionably the most original thinker among all Italian economists. In his *Economia Nazionale* (1774), his *Riflessioni sulla Popolazione* (1790), and in some of his minor writings, he develops a complete system of economic science. The fundamental notion from which he starts is, that a given population cannot consume, and therefore cannot produce, more than a limited quantity of goods, and that this quantity is just such as to require for its production not more than the labour of one-half of the given population. Hence he deduces the opinion that a man cannot increase his own wealth without reducing to a corresponding extent the wealth of another man; in other words, that the increase of individual wealth involves a correlative increase of misery. From the principle that one-half the population suffices for social production, Ortes, anticipating modern socialism, deduces the hopeless case of a relatively excessive population, due not to a positive excess of population above the means of subsistence, but to the impossibility of increasing consumption, and therefore social production, beyond a certain point. In this deduction Ortes manifests a logical acumen far superior to that of RISMONTI. The latter, whose influence on MALTHUS and RICARDO was considerable, also starting from the limitation of social consumption, admits the necessity of the introduction of machinery to meet the relative excess of population.

The last remark of our note on the opinions of Ortes, indeed, applies more or less to, all Italian political economy of the early period. The leading features of the social economy which succeeded the abolition of serfage in Italy were for a long period the breaking up of capital, the growth of metayage, the continuance of small industry,—in other words they presented a stunted form of capitalism crossed and complicated by numerous relations of personal service between labourer and proprietor, the relics of feudalism. This network of economic relations created a scientific literature in which it was reflected. No sound theory of distribution could be formulated in a country where the phenomena of distribution had not assumed a distinct and fixed character, nor had those glaring contrasts to which a social economy

Ortes, however, in his *Riflessioni sulla Popolazione*, published fourteen years after his principal work, admits, in partial divergence from what he had there laid down, that a population might possibly outrun its means of subsistence—an emergency which is in contradiction to the axiom, that *wealth is a constant function of population*, since it implies that, up to a certain point, wealth increases at a lower ratio than population. Finally, from the fact that the unemployed can only live at the expense of the employers (*i.e.* those who have property), Ortes deduces the principle that *real income is equal to each*, because those who have property have to distribute all the returns which are in excess of what they consume between the workers and the unemployed.

These quaint doctrines, which MARX very ably made use of to support his own, betray constantly the backward state of the science, exaggerating the importance of consumption and attributing to this factor, which only influences the surface of things, phenomena which have their roots deep down in the organism of production. Still more defective are the investigations of Ortes on capital and profit. Defining capital as the sum of the means of subsistence necessary to the worker, he does not take into account capital sunk in machinery, raw material, etc. While he recognises the economic justice of interest on capital, he declares it to be a thing which, properly considered, is entirely anomalous, for the reason, that capital lent at interest yields a return to the lender and a wage for the workers, but nothing to the borrowing ENTREPRENEUR, who hence will have either to go to the wall or to steal from his creditor. This observation is obviously erroneous, because capital does produce, besides interest and wages, the reward of the *entrepreneur*. But these doctrines appear less strange when viewed in relation to the economic conditions of the time. The principle of fixity in production is a faithful image of the economic positions of the expiring Venetian republic, in which there was no progress in production, and every industry was languid. The hopeless case of an unemployed class was true enough of a country in which the accumulation of capital was feeble, and shackled by the countless fetters of antiquated methods of production. The definition of capital given by Ortes fits an epoch when capital in its technical shape is almost non-existent. And the same idea of real income being equal for every man may be considered a tolerably correct expression of the relations of feudal economy, which, in placing the strength of the property-holder in the number of his followers, broke up his returns between a large number of clients, and ultimately reduced to the same figure the consumption of himself and of his dependants. The disconsolate fatalism of Ortes which sees no remedy whatever for the economic evils of the day, and the only palliative in the endowment of monasteries to relieve the wretchedness of the poor—which restricted thus the scope of economics to the mitigation of human misery,—all this distinctly and completely reflects the state of decay under which Italy was groaning. Hence in reading at this day the works of Ortes there is still profit, not in the nebulous musings of a recluse, but in the theorising of a genius over an age now buried. [See also art. on ORTES.]

gives rise, in which capital is more fully developed, had a fair field to display themselves. Hence, all that Italian economists of past centuries have written on distribution is collectively of very small value. But while they were excluded, through the defects in the existing economic position, from the possibility of investigating the deep-lying social relations, they set themselves eagerly to examine those more patent economic relations the growth of which, being independent of that of more fundamental relations, had opportunity to display itself even in Italy. Hence, the considerable body of writings on currency, which are the best part of Italian economic literature, as well as on commerce, usury, and taxation; while the investigations on value, which occur frequently at this epoch, are confined to analyses, more or less effective, of wants, utility, competition, or monopoly, but which do not in the least account for the influences determining the part played by value in the deepest relations of capital and profit and in the technical organism of production. Certain it is that the closer we approach our own times, the more frequently do we find among Italian economists good examples of a profound analysis of the economic structure of society, as in the works of ORTES, GALIANI, BECCARIA, VERRI, GENOVESI, and PAGNINI (*q.v.*). But, generally, throughout this epoch, and even among these, we look in vain for that fine economic sense which distinguishes their English contemporaries so conspicuously.

2. *Superficial and optimistic phase.*—With the close of the 18th century, capital had begun to develop its influences in Italy to a degree hitherto unknown. It seemed therefore that the causes of the slow advances of economic theory were ceasing to operate, and that the era of scientific economics in Italy was to begin. But there were weighty reasons which influenced capitalistic economy and kept it backward. The most powerful of those was the want of political union; this involved a close network of inland custom-duties, which stifled economic progress and the growth of capital. Hence, the absence of farming and industry on any large scale and the scanty use of machinery. This absence of production on a large scale is certain to react on theory and to produce a school of superficial and optimistic political economy. The inferiority of the work of most of the writers of this epoch is, therefore, not surprising, nor that the few original thinkers should gradually drift from tedious superficiality to optimistic doctrines. During this epoch no important contributions were made to the theory of the distribution of wealth, or to the analysis of property, while there is no lack of suggestive investigation into such secondary matters as currency, trade, and taxation.

The period 1800-1848, is for Italian economics an inglorious time of depression and

decadence, yet it was distinguished by the monumental collection of classical Italian economists, formed by Baron CUSORI, *Scrittori Classici Italiani di Economia Politica*, forty-three volumes, 8vo, Milan, 1802-16. The importation of Smith's doctrines, instead of acting as a stimulus to reflection, only evoked a number of second-rate compilations. There are but one or two writers of this period who stand out from the general level of inferiority by their able investigations into some special problems. Amongst these is Melchiorre GIOJA (1767-1829), the advocate of large landed estates and industrial protection, remarkable rather for some important observations on the division of labour, which were praised by BABBAGE, than for his indefatigable collecting of statistics, and his infelicitous attacks upon Smith and SAY. There was also Gian-Domenico ROMAGNOLI (1761-1825), a masterly critic of free trade, who showed his concurrence with the ethical view now upheld in Germany, and who combated the population theories of MALTHUS though not without committing serious blunders; Luigi Molinari VALERIANI (1758-1828), author of deep, careful investigations into "market value"; Francesco FUOCO (died 1841), who expounded the Ricardian theory of rent, and is noted for the pre-eminence he assigns to the distribution of wealth over its production; Carlo CATTANEO (1801-1869), a defender of free trade and a critic of the system of LIST (1789-1846); Pellegrino ROSSI (1787-1848), who lectured on political economy, expounding English economics, and criticised the Code Napoléon from the economic standpoint; Antonio SCIALOJA (1817-1877), who published *Principles of Social Economy*, toning down the theories of the English school; finally Camillo CAVOUR (1810-1861), distinguished for his admirable writings on the corn trade, the Irish question, and his speeches on economic and financial subjects. All these writers inherited an ethical standard in economics which up to 1848 characterised the Italian school of economists; and all, however they may differ in the systems they uphold, hold most pronounced opinions on the moral functions of the state and its social duties towards the classes who possess no property.

Towards 1850 a distinct awakening succeeds to these indecisive writings of unsystematic writers, proceeding from the optimistic school and its head, Francesco FERRARA.¹

¹ F. Ferrara, born 1810, of Sicilian origin, professor at the university of Turin, and subsequently deputy and minister of finance, is unquestionably the most talented Italian economist of this period. Ferrara has written no comprehensive work, but has expounded his ideas not only in a course of able lectures, but also in a series of *Introductions* to the numerous volumes of the *Biblioteca dell'Economista* which he edited, and which contain translations of leading foreign economic works. In these introductions, which combine the attractions of a brilliant style, a method of teaching of vast range and marvellously elaborated, there is found not only a series

3. *Scientific Phase.*—The conditions of the time favoured the abandonment of optimistic doctrines for objective and positive inquiry. Under the regime of political unity the obstacles

of criticisms, biographies, and bibliographies, but also Ferrara's own theories, forming a symmetric and usually concordant whole. These take their rise from the theory of value, which he declares to be the mother-idea of the science, and develops with much originality save where he adheres closely to the doctrines of CAREY. Like him, Ferrara opposes RICARDO's theory of value and that of J. B. SAY, to land himself in the formula of *cost of reproduction*. This theory, which he carefully develops, seems to Ferrara to be alone capable of summing up and unifying all economic phenomena, inasmuch as it explains value as well in the case of production which may be indefinitely increased as in the case in which increase takes place under augmented difficulty, and also in monopolies. However, to include these last within the circle of his theory, he is compelled to have recourse to a subtle distinction between *physical* and *economic* reproduction, and maintains that the value of the monopolised products is given by the cost, not of the physical reproduction, which is impossible, but of the *economic* reproduction, i.e. by the cost of the products which would be obtained instead of the monopolised products.

In this way Ferrara believed he had subsumed the true heads of value under a single law, overcoming the Ricardian theory which is forced to postulate two laws for competition and monopoly respectively. But further, he held that cost of reproduction ought to explain and measure by the same standard all the relations of the distribution of wealth. Hence, Ferrara argues, rent, profit, wages, are only so many instances of the law of cost of reproduction. To rent in particular, on which English science has left the indelible stamp of its strong hand, Ferrara devotes his best energies; strengthening himself by his theory of value, he attacks the doctrine of Ricardo and reconstructs the rent of the landowner as the natural and legitimate reward of capital and labour. Here, however, Carey inspires and directs Ferrara, who, if he does not distinctly grant that cultivation proceeds from sterile to fertile soils, admits that economic progress renders the cultivation of fresh soil more productive than those previously taken in hand, thus ensuring an advantage to the land later brought into cultivation over the first. The owners of the later land cultivated derive in consequence a surplus rent, or surplus over ordinary profit, due to the superior methods they have designed and carried out. Hence rent results, not from increasing cost of production, but from decreasing cost of reproduction, and involves neither usurpation nor injustice. Further, since the same theory is to explain all economic phenomena, profit is measured by the cost of reproduction of capital, wages by the cost of reproduction of labour; which means that ultimately demand and supply of capital produce profit, demand and supply of labour produce wages.

In his minor works, the *Prefazioni* and the *Lezioni*, Ferrara sought to apply his favourite theory to certain practical questions, using pure science to throw light on the economic facts of which he was an eye-witness. Among these writings are the exhaustive articles on "Banks" and on "Inconvertible Paper Currency" (Corso Forzoso), abounding in admirable remarks on the circulating medium in Italy (see ASSIGMAT; BULLION COMMITTEE, REPORT OF; FORCED CURRENCY; INCONVERTIBLE CURRENCY); others on the banks of Venice and on taxation of flour, which Ferrara defends with partial inconsistency in view of his free-trade theories. It is not wonderful that so extraordinary and gifted a writer should have created a flourishing school attracting into his orbit the best intellects of the peninsula. Minghetti, in a well-known work remarkable for brilliancy of style (*Della economia pubblica e delle sue attinenze colla morale e col diritto*, 1858), accepted and supplemented Ferrara's theory; Raymond in his *Etudes sur l'Economie sociale et internationale* (1860-61), further confirmed it; Antonio Ciccone, Angelo MARESCOTTI, Giovanni Bruno, Todde, and others commented on it in their treatises. During a long period, Ferrara occupied a solitary and preponderating position in Italian economic literature, due rather to his marvellous ability than to the soundness of his doctrines. Italian intelligence has extricated itself from the spell of the illustrious theoriser; his system has gradually been abandoned.

to the establishment of a social economy based on capital became slowly removed. The distressing phenomena of a critical period of social evolution in Italy were attracting investigation. Statistical research, directed by the hand of Bodio, revealed the vitiated character of the system by which wealth was distributed, the encroachments of the *latifundia*, the spread of short leases; and important publications showed that the actual state of the rural classes was as degraded as it well could be. Sonnino, Villari, Franchetti, Mme. White Mario, Lombroso, Stivanello, Mortara,—all these illustrated the condition of the agricultural classes in a series of memorable monographs, while the exhaustive work of the agrarian commission contributed ample materials invested with official authority. In those reports Emilio MORPURGO drew in the dark hues of truth the deplorable wretchedness of the agricultural classes in Venetia. And the reports of JACINI, Angeloni, Branca, Tanari, and Damiani showed that Italy had reached her lowest level of misery, inasmuch as from provinces mutually dissimilar there was heard but one wail and the selfsame moan.

A new habit of research and criticism informed economic thought from end to end of the peninsula, and a legion of clever and ardent youths flung themselves into the open field of social inquiry. Theirs is the merit that Italy occupies a position in the political economy of to-day on a level with more advanced countries; theirs is the merit that she has entered on the scientific phase.

Even in the preceding generation Italian writers were not wanting who set themselves to study economic relations with impartial criticism, e.g. Girolamo BOCCARDO, who in his *Trattato teorico-pratico di Economia Politica* (1853), still the delight of the Italian student—defended and repolished the exact theories of Ricardo. It was, however, especially in the field of technical and specific inquiry that scientific economics was to prevail. Among the first indications of this tendency was the book by Baer, *L'avere et l'imposta* (1872), praised by J. Stuart Mill,—the *Logica delle Imposte* (1867), written by Pescatore, a calm and impartial study of public finance; and Jacini's work, *La Proprietà fondiaria e le Popolazioni agricole in Lombardia* (1854), a good example of positive analysis.

But the real initiator of the scientific method is undoubtedly Angelo MESSEDADGLIA. A distinguished physicist and mathematician, Messedaglia appeared least of any one inclined to examine the burning questions of economics, his turn of mind inclining him rather to more special and calm studies. Therefore he launched into a series of investigations into population, public loans, currency, taxes on real property, in which he sought to secure not the triumph of a school, but to lay bare and differentiate the most intimate connections of economic

phenomena in a number of monographs written with conscientious and exact precision.

In his book *Della Teoria della Popolazione, principalmente sotto l'Aspetto del Metodo* (1858), unfortunately unfinished, Messedaglia puts forward an emendation of the Malthusian theory, namely, that the two progressions of subsistence and population cannot proceed as mutually isolated and independent. The latter is strictly limited by the former, which gives a different result from that reached by Malthus. For, given the former rate, two, three, four, five . . . and the latter, two, four, eight . . . it is evident that in the latter the second term will be suddenly reduced to three by the limit of subsistence killing off the surplus. Hence the successive doubling of population can only start from three, raising numbers in the third turn no higher than six. This again, colliding with a sum of subsistence equal to four, becomes reduced to four, and this by the given rate gives eight. Hence the real progression for population is two, four, six, eight, ten . . . i.e. an arithmetical progression with a constant difference double that of the rate of subsistence. Equally important are Messedaglia's further developments of the population theory, the statistics moreover of which, and the methods of handling them, he has expounded and criticised with great acumen in a solid work on the *Vita Media* (average of life). In his book on public loans, Messedaglia discusses the different questions connected with raising public loans, and in his recent work on currency, the history of money and prices, and the controversy on the legal standard. Finally his report *Sulla Perequazione Fondiaria* (1884) gives a history of the Cadastre (see CADASTRAL SURVEY) from the earliest times, and of the character of the surveys of land, and the taxes based on them in widely-separated and contrasted countries and states. The works of Messedaglia are in some points open to criticism, especially for their eclecticism and the indefiniteness of his results, but his labours will leave an enduring mark on Italian economic thought.

Messedaglia's strictly scientific method, which he employed on technical subjects extraneous to social controversies, has been applied by other and well-known economists to the most burning questions concerning the distribution of wealth. Among these Emilio Nazzari should be mentioned, who, while the prevailing school was yet seeking to draw a veil over the more painful phenomena of our economic system, courageously examined the laws of rent (1872), profit (1877), and wages (1880), developing and amplifying the theories of Ricardo. The writings of Nazzari mark a new starting-point in Italian political economy, leading it to reject optimistic fallacies and to initiate a vigorous criticism of the relations of production. However, neither he nor the other Italian economists of the same school have adopted the extreme conclusions of their doctrines, but have laboured rather to

qualify them by every possible means. Thus Nazzani seeks to soften the asperities of the Ricardian theory of rent, and the teaching of the English school; nevertheless he has laid the foundations of solid inquiry into the laws of distribution.

Again Fedele Lampertico influenced the economic revival in Italy by reproducing English and German theories in a lengthy treatise (1874, etc.); while Luigi Luzzatti, eloquent opponent of the exaggerations of *laissez faire*, has ably dealt with treaties of commerce, tariffs, currency, and credit, both in his writings and parliamentary life.

But the chief honour of the peaceful revolution whence scientific economics in Italy have sprung belongs unquestionably to Luigi COSSA; he not only contributed a noteworthy and original essay on the limits of production, and diffused and championed in Italy the theories of the English school, harmonising them with those of Germany (which have also been popularised in Italy by Cusumano), France, and Holland, in which he is extremely well read; but he has also by teaching, by prizes, and instructive writings stimulated the economic studies of young Italy, creating around him a compact phalanx of able and diligent disciples.

A testimony to the awakening power of such masters may be seen in the numerous publications of youthful Italian economists, all educated in the new and progressive tendencies and agreed in the search for truth, however else they may differ. Of those cultivating exact science are Buzzetti, who has dealt with internal values and agricultural contracts,—Ricca-Salerno, who has dealt with capital, public loans, and wages,—Graziani, with machinery and wages,—Alessio, Bertini, Valenti, and Tangorra, with the theory of value,—Manara and Masé-Dari, who have examined rent,—Supino, capital and its transformations,—Majorana, economic laws,—and many others besides. While these economists are mainly deductive in treatment, others complement abstract research by a judicious application of the historic method. Among these, COGNETTI DE MARTIS wrote on primitive forms of economic evolution and the origin of socialism,—Toniole on the factors of the economic power of medieval Florence, and the relation of scholasticism to humanism. Other writers apply sociology to political economy, like Vanni, an eminent philosopher, and Nitti, author of the book on *Catholic Socialism*, in their works on population. Ugo RABBELO, who follows the inductive method, treated of co-operation, its laws, and development in Italy and England, with great talent, and also wrote a work on the phases of American protectionism. Equally skilled in statistical method, and more decided partisans of the socialism of the chair, are Carlo F. Ferraris, author of a book on labour insurance in Italy, and Augusto Mortara, who, in his work *I Doveri della Proprietà fondiaria e la questione sociale*, suggests state intervention in the tenure of land on behalf of the labourers.

Meanwhile there is no falling off in more strictly technical publications, as on credit, trade, and finance. First among these should be noticed Maffeo Pantaleoni's *Teoria della Traslazione dei Tributi*, skilfully explaining the shifting incidence of taxation. This book, not to mention others by

the same author (*v.* works named later), shows how great has been the progress of scientific investigation in Italy. We may mention the labours of MAGLIANI, to whom we owe the most thorough critique of bimetallism, of Ferraris, Stringher, Piperno, G. Luzzatti, De Viti, Loria, Benini, Lorini, in monetary questions to which modern Italian economists, like their earlier brethren, and unhappily for the same reasons, have given much attention. Thus on banks we have works by Boccardo, De Jehannis, the *Storia delle Banche* by Rota, and the *Principii di Scienza bancaria* by Rota and by Ferraris. On rural economy there are the writings of Bertagnolli (*v. Authorities*), and others of equally high quality, by Bianchi, Emilio Cossa, and Sartori. On subjects of applied economics mention should be made of the labours of Graziani (*Teoria delle Operazioni di Borsa*), of Supino in his essay on discount, and especially in his *Navigazione dal Punto di Vista economico*, in which he discusses questions of freight, cost of navigation, and generally the economy of maritime enterprise. The writings of Montemartini and Della Bona on crises are also worth note, of A. Rossi and Benini, both protectionists, on the balance of trade, of Dalla Volta on industrial combination and forms of wages, of De Viti, Salandra, Alessio, Zorli, Graziani, and Puviani on financial questions. Here, too, quite apart from the subjects of the day, mention must be made of the bibliographical series published by a group of writers, Alberti, Montanari, Cusumano, Ricca-Salerno, Fornari, Sinigaglia, Loria, Errera, Gobbi, Supino, Congianni, Graziani, Balletti, De Viti, Bertolini, under the editorship of Cossa.

The acclamation which in recent years greeted the rise of the AUSTRIAN SCHOOL (*q.v.*) could not fail to excite a fascination on Italian minds. The natural consequence has been a multitude of commentators on the theories of JEVONS, Menger, Böhm-Bawerk, Sax, and Wieser. For instance, Graziani accepts their theory of value in his *Storia critica della teoria del valore in Italia*, and so in part does Pantaleoni in his *Principii di Economia pura*, and Alessio in his essay on value, already mentioned. Again Sax's theories on finance are reproduced in the *Manuale di Scienza delle Finanze* of Ricca-Salerno, and accepted, with certain modifications, by CONIGLIANI (*Teoria degli Effetti economici delle Imposte*), by Graziani (*Di alcune questioni intorno alla Natura e agli Effetti economici delle Imposte*, 1889; and *Natura economica delle Imposte sulle Successioni*, 1890), and by MAZZOLA (*I Dati scientifici della Finanza pubblica*, 1887).

Economic study has received a vigorous impulse in Italy through the *Giornale degli Economisti*, an able review, edited by eminent writers with the collaboration of the best intellects in the kingdom. It courageously opposes protection, both agrarian and industrial, which has come to the front of recent years in Italy, to the great injury of national economy, and bestows a keen and conscientious criticism on the monetary and bank policy of the Italian government.

The work of certain other writers does not come under any of the preceding categories. Among these are economists who are free-traders and

optimists, such as Berardi, De Johannis, Martello, Dalla Volta, Bertolini, Todde, Pinna-Ferrà, Pareto, etc., whose organ is *L'Economista*, and a rising knot of authors occupied with socialist theses,—defended with moderation and learning by Napoleone Colajanni in *Socialismo e Sociologia criminale*,—and of which the leading organ is *La Critica sociale*, ably edited by Filippo Turati.

Finally there are some Italian economists whose line of thought diverges from all the foregoing. These see in the analysis of the relations of real property a key by the aid of which they seek to penetrate the yet unsolved problems of the distribution of wealth; following this method they have reached a number of results in the theories of value, currency, profit, interest, rent, population, and the interpretation of economic and political history. The system was set forth for the first time by Achille Loria in *La Rendita fondiaria e la sua Elisione naturale*, 1879; and *Analisi della Proprietà capitalistica*, 1889; and applied to sociology by him in *Les Bases économiques de la Constitution sociale*, 2nd ed., Paris, 1893. It starts from an analysis of the economic influences exerted by the presence, or absence, of free land, not like WAKEFIELD, to deduce how new countries should be organised, and still less to mourn with Von THÜNEN over the distribution of wealth obtaining in old countries, but to trace out the organic laws and structure of the capitalistic economy. Amongst Loria's analyses we may mention that which reduces value to *complex labour*, complementing Ricardo's theory; his analysis of money, in which he traces the origin of money, completes Mill's doctrine of international values, and corrects FULLARTON's theory on *hoards*; his analysis of the distinction between *technical capital* and *wage capital*; his distinction between distribution of wealth, i.e. distribution of the produce between wages and income,—and re-distribution of wealth, i.e., distribution of income between earnings of the undertaker (*entrepreneur*), interest on capital, rent of land and taxes; the amount of the bank reserve; the theory of the systematic excess of population; the comparative analysis of the economic development of the American and Australian colonies, and of Europe, showing how the economic relations existing in ancient Europe are reproduced in modern colonies. This system, which has been called "the landed property system of political economy," now counts amongst its partial or thoroughgoing adherents Rabbeno, Nitti, E. Cossa, Garlanda, A. Mortara, Masè-Dari, Flora Sartori, Bianchi, Supino, De Marinis, Coletti, Petroune, and others.

[Recent works are:—Alberti, *Le corporazioni d'arti e mestieri negli antichi economisti italiani*, Milano, 1888.—Alessio, *Saggio sul sistema tributario in Italia*, Torino, 1883-87; *Studi sulla teoria del valore nel cambio interno*, Torino, 1890.—Baer, *L'avere e l'imposta*, Torino, 1872.—Balletti, *Gasparo Scarruffi e la questione monetaria nel secolo XVI*, Modena, 1882.—Benini, *Le basi di una nuova teoria della circolazione*, Cremona, 1887.—Bertagnoli, *La colonia parziaria*, Firenze, 1877; *Vicende dell'agricoltura in Italia*, Firenze, 1881; *L'economia dell'agricoltura*, Roma, 1886.—Boccardo, *Trattato teorico-pratico di economia*

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IVERNOIS, SIR FRANCIS D' (1757-1842). A French émigré, was knighted by George III. He returned to France in 1814.

His principal works were: *Tableau historique et politique des pertes que la révolution et la guerre ont causées au peuple français dans sa population, son agriculture, ses colonies, ses manufactures et son commerce*, London, 1799. A work in form too much resembling a party pamphlet, but many of its reflections are valuable; and *Sur la Mortalité proportionnelle de quelques populations considérées comme mesure de leur aisance et civilisation*, Genève, 1832.

[The *Nouvelle Biographie générale*, Paris, 1858, vol. xxv., contains a full notice of him, and lists of works. See also Coquelin and Guillaumin's *Dictionnaire de l'économie politique*, Paris, 1852-1853.] H. E. E.

